



# Check Designer 1.3

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Check Designer is a specialized WYSIWYG editor for creating your own MICR encoded checks.

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## Shareware Version

To Register, send \$40 U.S. to:

Matt E. Hart  
2516 W. Kingsport  
Broken Arrow, OK 74011

CompuServe: 75450,3705

You can also register on CompuServe via GO SWREG, id# 3438.

## VERSION HISTORY:

### Updated from 1.11

- Changed template format for easier use
- Added logo position adjustment for multiple checks

### Updated from 1.1

- Fixed mouse disappearing problem

### Updated from 1.0

- Improved template handling
- LOAD and SAVE option for multiple template files is now on the template entry screen**
- In addition, a default Quicken laser standard template is included**

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# About Check Designer

Check Designer is a specialized WYSIWYG editor. WYSIWYG is an acronym for "What You See Is What You Get", meaning the document presented on screen will appear the same way when printed.

The graphics and text displayed in CD will appear in exactly the same size on your printed document. They can be resized.

CD includes a template for automatically placing all of the standard check information, such as name and address, bank information, PAY TO and other headings, and memo lines.

CD will print the MICR (Magnetic Ink Character Recognition) characters on your check. In order to print valid checks, you must use a MICR toner cartridge in your laser printer. You must also use check stock paper, which is essentially checks with absolutely nothing printed on them. These checks are available in voucher format (one check and two stubs) and in triple check sheets. CD will automatically duplicate the top check when you use the triple check sheets.

## Advantages

There are several advantages to using Check Designer over simply ordering your checks pre-printed. First, you have the ability to use custom logos, bitmaps, and fonts. You can quickly and easily generate different checks.

Second, you need not throw away checks when you change banks, simply print new ones with the new MICR and bank information. Lastly, and most importantly, it is very cost effective. Laser pre-print checks are quite expensive. A MICR toner cartridge costs only a bit more than a standard toner cartridge, and can be used for normal printing. Blank laser check stock costs as much as one-third less than laser pre-print checks.

A MICR toner cartridge has a higher iron content than standard toner cartridges. While some standard cartridges can be read by MICR readers, they almost always have below average signal levels.

One feature of Check Designer is a MICR pass only, in which you can print the MICR information separate from the rest of the check.

### System Requirements

Windows 3.1

2 meg RAM (4 meg recommended)

8 meg free disk space

Mouse

### Recommended Video Configuration

800x600 or 1024x768, 16 or 256 colors

# Getting Started

Check Designer uses the default Windows printer. This must be a 300 DPI printer. If you have a printer which can print at resolutions higher than 300 DPI (such as a LaserJet 4), run Control Panel, select Printers, and setup your printer to use 300 DPI. MICR information will not print at the correct size if printed at any resolution except 300 DPI.

You must install the MICR screen font in order to see the MICR fonts as you type them in.

From the Program Manager, select the Control Panel. From the Control Panel, select Fonts. Then press ALT+A (Add...). Select the drive by pressing ALT+V, drive. CHECK DESIGNER MICR will appear in the List of Fonts. Select this by pressing ALT+F, down arrow, ENTER.

Check Designer will work fine without this font installed, but you will not be able to see the MICR fonts as you type them in.

Check Designer also needs the default MS Sans Serif, Small Fonts, and WingDings fonts to be installed. These are automatically installed when you first install Windows, and will not be removed except by the "misbehavior" of another application. Check Designer will report that it cannot access these fonts when first run, and it will offer to install them for you. The actual installation simply adds the relevant fontname = filename to the [fonts] section of your WIN.INI file. The additions are:

```
[fonts]
MS Sans Serif 8,10,12,14,18,24 (VGA res)=SERIFE.FON
Small Fonts (VGA res)=SMALLE.FON
WingDings (TrueType)=WINGDING.FOT
```

If the filenames are not in your directory, then an error will occur when you enter Windows. Unless those files were specifically deleted, then they should exist. If you have any doubts about Check Designer adding things to your WIN.INI, you can use the Control Panel/Fonts option to add the fonts. Just select the directory to add fonts from, and choose the MS Sans Serif, Small Fonts, and WingDing fonts to add.

Exit and restart Windows for the font changes to take affect.

# Creating Checks

## Adding Text

To add text, press CTRL+T or click on the text tool. Point the cursor at the location where you want to add the text and click the left mouse button. (NOTE: All clicks refer to the left mouse button unless otherwise noted.) A cursor will appear at the entry point. Type in your text.

Press ENTER to complete the entry. When entering the first text of a font, it is possible that you will experience a momentary pause while the computer prints the information on the permanent check image. This is normal.

Press ESC to abort the text entry.

You can select the font type, size, style, and color which will be used when entering new text by pressing CTRL+F or clicking on the font selection tool. The current font name, size, style, and color will be displayed at the bottom center of the screen.

## Modifying and Moving Text

To change the text type, size, style, or color, press CTRL+A or click on the arrow tool. Then point at the text you wish to change and press CTRL+<click>. The font information box will appear. Make your changes and press ENTER to save, or ESC to cancel.

To move text, press CTRL+A or click on the arrow tool. Then point at the text you wish to move and press SHIFT+<click>. Move the text to its new location and <click> to place the text.

You don't need to hold the mouse button while moving the text (drag the text).

NOTE: To scroll the check, you can press the arrow keys, or CTRL+ arrow keys, instead of using the scroll bars.

NOTE: When adding, modifying, or moving text, all additions and changes will be duplicated on the triple checks when the Auto Duplication option is checked.

## Graphics Primer - How CD uses Graphics

CD can use BITMAP and METAFILE format graphics (\*.BMP or \*.WMF). These graphics must be saved in a file. You can also transfer bitmap or metafiles from the clipboard, but you will be prompted to save them to a file.

All bitmaps are originally one size, such as 300 dots across and 300 down. When loaded into CD, the size that the graphic will be when printed is shown. That is, the graphic is scaled on screen to what you'll see on the printout. This will often result in a loss of clarity on the display, but you will have no loss of clarity when the graphic is printed.

The file 300DPI.BMP is included to test your printer setup. When loaded, this graphic should be exactly one inch across and one inch down by the rulers on screen. If it isn't, then exit CD and load the Control Panel, Printers, and check the setup of the default printer. It must be set to 300DPI.

When resizing graphics to a larger size, they will lose resolution and get the "jaggies". Smooth curves will become more ragged.

When resizing graphics to a smaller size, they may lose clarity, depending on how detailed the graphic is.

Graphics which do not exhibit this effect are METAFILES. Metafiles generally do not contain as much detail as bitmaps, but they retain their quality when resized. Metafiles are also much smaller than bitmaps, consuming far less memory and disk space. Most clip art is provided in the metafile format.

If you use a scanner to create bitmaps for use in CD, then you should always use the scanner's ability to change bitmap size using an alternate scanning resolution. Also, use black and white or grayscale scanning for the best results.

For example, a bitmap scanned at 300 DPI will print at exactly the same size as the original. Scan at 150 DPI and you will end up with a graphic half the size of the original. Scan at 450 DPI and the graphic will print 50% larger than the original.

So if you have a large graphic that you want scanned in, and you want that graphic to end up a different size once it is printed, then use this formula to determine what resolution to scan at:

Orig = Original's size in inches

New = Desired size in inches

$\text{ScanDPI} = \text{New} / \text{Orig} \times 300$

In using this method to determine resolution, you need to determine whether the most important size factor is the horizontal or vertical size. Use only one of them in the calculation.

For example, I have an image on paper that is 3 inches across. I want it to end up 1.25 inches across. Apply the formula:  $\text{ScanDPI} = 1.25/3 \times 300 = 125\text{DPI}$ . So I would scan at 125DPI. The resulting graphic would print 1.25 inches across when printed on the 300 DPI printer.

Using this method will result in the best detail and highest quality graphic.

## **Adding Graphics**

To add graphics, press CTRL+L or click on the logo tool. You will be presented with the file dialog box. Select the bitmap graphic you want to load. Once loaded, the graphic will appear in the upper left hand corner. Move the graphic where you want it and <click>. The graphic will be placed at that position. When placing a graphic, you may experience a momentary pause. This is normal. Press ESC to abort the process

## **Modifying and Moving Graphics**

To resize a graphic, press CTRL+A or click on the arrow tool. Then point at the graphic you wish to change and press CTRL+<click>. Move the mouse to resize the graphic and <click> to set the new size.

To move a graphic, press CTRL+A or click on the arrow tool. Then point at the graphic you wish to move and press SHIFT+<click>. Move the graphic to its new location and <click> to place the graphic.

You don't need to hold the mouse button while moving the graphic.

NOTE: To scroll the check, you can press the arrow keys, or CTRL+ arrow keys, instead of using the scroll bars.

NOTE: When resizing or moving a graphic, all changes will be duplicated on the triple checks when the Auto Duplication option is checked.

## Using the Template

A simple method has been provided for creating your checks. The Check Designer Template allows you to automatically create checks compatible with the software you use.

To access the template, press ALT+M, E. This screen has entry boxes for 5 lines of name and address information. There are also 20 entry boxes for all other information, such as bank information, PAY TO types lines, memos, and signature lines. There is also a box for the check number. If you need more than 5 lines for the name and address, you can use the other boxes.

Automatic centering will occur for the name and address if you click the Center Name/Address checkbox. The bank name/address also has a centering option.

The X and Y columns are for entering the position, in inches, from the upper left corner of the check. The Edit button is for setting the font characteristics for that entry. NOTE that the font size does not change on the template entry screen when you select a new font size, but the new size is used when the entry is printed, both on screen and on the printer.

The Vertical Adjustments are for adjusting the vertical print positions on the triple check. The sizes of each check may vary, so the adjustment column can keep the text printing close to the same place.

## Check Numbers

To use one of the entries for a CHECK NUMBER, which will be automatically updated when you print multiple checks, enter ##### (7 or more pound signs), plus the position and font information for the check number.

When printing voucher checks, the check number printed will be duplicated on the vouchers in the same position.

NOTE: You must define the check number position using the template in order for it to be automatically printed.

Once you have entered all of your template information, press ENTER. The information will be printed on your check, and duplicated if necessary.

You can move the created text around on the check. Once you are satisfied with the positioning, you can choose to update the template with the changed positions. Press ALT+M, U. The centering options will automatically disable.

NOTE: Only text created by the template can affect the template positions during an update. In other words, you cannot create text on the check and have it appear in the template. It must first be entered in the template.

## Tips on using the template

The template is the easiest way to add text. Select the template, pick an unused box, and add the text. Then let the template create your check. The text you added will appear in the upper left corner (since you didn't enter X or Y positions). Move the text to the location you want it. Then choose Update Template, and the new position will be saved in the template.

## Entering MICR Information

MICR codes, are used by banks to properly route your check to your bank and your account. When these checks are read, they pass through a magnetizer, which gives the ink a small magnetic charge, and

then through a reader, which analyzes the density and positions of the charge. The unique shape of each character has a unique magnetic signature. The MICR codes are the numbers 0 through 9, plus four special symbols. These symbols are:



Transit



ON-US



Amount



Dash

The transit symbol is used by all banks at the beginning and end of the transit number. This number is unique and identifies one bank to another. The transit number will always be 9 numbers with a transit code at each end, beginning about 5.75 inches from the right of the check.

A transit number will look like this:



In addition to the transit number, almost all checks include the bank account number. On both business and personal checks, this is usually located to the left of the transit number. On business checks, the check number is usually printed, surrounded by ON-US codes. There is no common method for displaying the account numbers. They can also start in any position other than the transit number or amount fields. Your account number may differ, but here is an example:



The account number should include at least one ON-US code in addition to the numbers, usually placed before and/or after the numbers.

The amount code will probably never be used in creating checks. Some banks will print the amount MICR information when they process checks.

If you need to print the check numbers in MICR, enter the pound sign "#####" as a placeholder, surrounded by whatever symbols are needed, usually an ON-US code at each end.

For example, most business checks will have the check number to the left of the transit number. It will look like:



So to have this print properly, enter:



in the Auxiliary ON-US field of the MICR entry screen.

Click on View Check Template to see the required printing/positioning information for proper MICR printing.



# Printing Checks

## Proper Setup and Printing

Check Designer uses the default printer. The printer must be setup to print at 300 DPI in order to properly print the MICR codes. If you want, you can print the MICR codes separately from the rest of the check. This would allow you to print graphics and fonts at a different resolution. When the MICR codes are printed, however, the printer must be set to 300 DPI.

To find out if your printer is setup correctly, select the Control Panel from Program Manager. Select Printers. The default printer should be the printer that Check Designer will print on. If it isn't, choose the correct printer and press ALT+E (Set as Default Printer). Then press ALT+S (Setup...). You should see a "Graphics Resolution" or "Printer Resolution" option. Make sure it is set to 300 DPI.

NOTE: If you had to change resolutions and/or printers, you must restart Check Designer by exiting and re-running it.

Press ALT+P or click on the printer tool to print checks. Click on MICR Only or No MICR option buttons if you want to only print MICR codes, or if you want to exclude MICR code printing.

Enter the starting check number if it is different than the number displayed. Enter a "0" or delete the number if you don't want check numbers printed. Press ENTER to begin printing.

Some blank check stock sheets will have a small square at the bottom of each check in the transit code position. This is used for visually verifying that the MICR information is printing in the proper location. As long as the first transit code prints fully within the square (it does not need to be centered), then the MICR information will be properly read.

NOTE: Any non-MICR code information printed using MICR toner within 5/8 inches of the bottom of the check may cause the check to be misread by the bank. Keep all text and graphics above the MICR clear zone or print the MICR information separately from the rest of the check information using the MICR Only and Text/Graphics only print options.

## **Purchasing Supplies**

You will need a MICR ink toner cartridge for your laser printer. For the checks, you'll need blank check stock. Most toner cartridge resellers also stock MICR toner cartridges. Blank check stock is available from many paper printing firms.

U.S. Business Forms sells both MICR toner and blank check stock in voucher and triple check sheets. They also have a MICR starter kit with a MICR toner cartridge and a sampling of blank check stock.

U.S. Business Forms                      800-745-5880

Hewlett Packard sells MICR toner cartridges, and most HP Resellers will carry it.

HP (Corvallis Distribution)              503-750-2407

## **NEW SUPPORT SERVICE**

You can now purchase your checks directly from me with the MICR information already printed!  
No need to purchase a MICR toner cartridge. Just mail in a blank, voided check with your order form and receive your checks, ready for adding your own text and graphics. Print the CDORDER.TXT file.

## **Support Services**

### **Online Support**

If you need assistance, you can contact me on CompuServe at address 75450,3705. If you aren't a member of CompuServe, then use the Internet address [75450.3705@compuserve.com](mailto:75450.3705@compuserve.com)

MICR stands for Magnetic Ink Character Recognition. A special toner cartridge is needed for printing the MICR information on checks.

DPI stands for Dots Per Inch. The MICR information must be printed at 300 DPI. If your printer can print at resolutions other than 300 DPI, make sure you set it for 300 DPI before printing the MICR information.



Press Ctrl+T or click on the text tool to activate text entry.



Press Ctrl+A or click on the arrow tool to activate.

Bitmaps are usually saved with the extension .BMP. They can be very detailed, but lose resolution and clarity when resized.



Metafiles are also known as clip art. Check Designer uses metafiles in the Windows Metafile Format with the .WMF extension. Metafiles are usually less detailed than bitmaps, but don't lose resolution or clarity when resized.

Press Ctrl+L or click on the logo tool to load and place a graphic.

The MICR codes are entered using the first letter of the code.



Transit



ON-US



AMOUNT



Dash



Press Ctrl+P or click on the printer tool to print checks.



Press Ctrl+F or click on the font selection tool to select the new text font.

The MICR Clear Zone is an area at the bottom of the check in which only MICR information should be printed using MICR toner. If other information is printed, such as a MEMO text line or a signature line, the MICR information cannot be properly read. Click on [View Check Template](#) to see the position of the MICR Clear Zone.

The CDORDER.TXT file contains the order form and other information. To print it, run NOTEPAD.EXE and choose FILE / PRINT.





