

Monu-Cad Pro

Reference Sheet

Creating an Alphabet

Step 1: Create the Font File

Create the Characters

1. Draw each individual character.

Rule: Make sure the alphabet is created based on a one-inch high standard letter.

Rule: The widths of each character should be accurately measured for later use in the spacing table.

2. Type PD to eliminate any background objects

3. Type DK to remove any duplicate lines

4. Type ST to sort each character before you create components.

***Before going any further, it is wise to confirm your letters are cutting correctly after you sort.*

Send each letter to the cutter.

Once confirmed it cuts correctly, then you can continue on. (See the Help Manual for instructions on sorting)

5. You will need to create components for each of the characters, by typing CC and making a box around each one. The following instructions will tell you what to name them and where to make the reference points in the component create box.

You must choose a three-letter combination to represent this group of characters. The names must all start with this three-letter combination, like “new” (i.e. newX.mcc).

The second part of the name must match the character (i.e. The character “A” would be named newA.mcc). Make sure you have “save new component to disk” checked in the Component Create box, and make sure you know where they are all saving because you will need to Component Place them later from that spot.

Component Naming Conventions

(Replace the example three-letter combination “new” with the combination you chose for this alphabet.)

| <u>Character</u> | <u>Component Name</u> |
|-------------------------|--|
| A – Z (uppercase A-Z) | newA.mcc – newZ.mcc |
| a – z (lowercase a – z) | newAL.mcc – newZL.mcc |
| 0 – 9 (numbers) | new0.mcc – new9.mcc |
| ` (accent) | new` .mcc |
| ~ (tilde) | not available – used to activate second font in add lettering |

| | |
|--------------------------|---|
| ! (exclamation point) | new!.mcc |
| @ (at symbol) | new@.mcc |
| # (pound sign) | newLBS.mcc |
| \$ (dollar sign) | new\$.mcc |
| % (percent) | new%.mcc |
| ^ (carrot) | new^.mcc |
| & (ampersand) | new&.mcc |
| * (asterisk) | not available – used to activate second font size in add lettering |
| ((open parenthesis) | new(.mcc |
|) (close parenthesis) | new).mcc |
| - (hyphen) | new-.mcc |
| _ (underscore) | new_.mcc |
| = (equal) | newEQ.mcc |
| + (plus) | newPLUS.mcc |
| [(left square bracket) | newLBRK.mcc |
|] (right square bracket) | newRBRK.mcc |
| { (left curly bracket) | newLSET.mcc |
| } (right curly bracket) | newRSET.mcc |
| ; (semicolon) | newSEMI.mcc |
| : (colon) | newCOLN.mcc |
| ' (apostrophe) | newAPOST.mcc |
| \ (back slash) | not available |
| “ (trailing quote) | newQUOTE.mcc |
| “ (leading quote) | newQUOT2.mcc |
| < (less than) | newLAROW.mcc |
| > (greater than) | newRAROW.mcc |
| , (comma) | newCOMMA.mcc |
| . (period) | newPERID.mcc |
| / (forward slash) | newSLASH.mcc |
| ? (question mark) | newQU.mcc |

(used by pressing the | (pipe) key)

If you wish to add one of the unavailable letters to your alphabet, it must be mapped to a different key on the keyboard.

(i.e. If you need to use the * (asterisk) but do not need an _ (underscore), then name the asterisk component using the underscore name. You will then need to press the underscore key in order to display the asterisk character on the screen.)

Reference Points

The reference point should be located at the bottom center of the character, where if you drew a line below the font it would be located on the line. Lowercase letters like p and g would hang below the line.

For certain alphabets, some capital letters also pass below the line like the O and V in Modified Roman. These components should have their reference points placed to take this into consideration (slightly above the bottom).

Create the Font File

1. Start with a blank drawing.
2. Place all of the character components for this alphabet on the drawing by typing CP. Placement does not matter.
3. Type PD for Pack Data. This will get rid of any unused component definitions in the background.
4. Type SF to Save Font. Give the font a name (i.e. newfont.fnt). Save the file in the C:\Monu-CAD_Win'95\fonts\ directory, which should already be set as the default.

Step 2: Create the Spacing Table

Copy a DTA File From Another Alphabet

Find a font already in MONU-CAD that has spacing you believe is close to what you need for your new font. Right click on the Start button and left click on Explore. This will bring up the Windows Explorer window. In Windows Explorer go to the C:\Monu-CAD_Win'95\fonts\ directory. Select the spacing table for that font (i.e. the spacing table for Press Modified Roman is skm.dta).

If you chose to name the characters using the normal naming convention (i.e. A is newA.mcc), then the spacing table should come from one of the original DTA files installed with MONU-CAD. Right click on the spacing table (DTA file) and left click on Copy.

Go to the bottom of the page on the right side. Right click on any open space and left click on Paste. A new file should appear at the bottom of the window named Copy of X.dta, where X is the name of the spacing table you chose. Right click on the new file and left click rename.

Rename the file so it matches the three-letter combination you chose in Step 1 for your characters (i.e. new.dta).

Step 3: Modify the Fonts List

Copy Previous Entry

Right click on the Start button and left click on Explore. This will bring up the Windows Explorer window.

In the left column go to the C:\Monu-CAD_Win'95\fonts\ directory.

On the right locate the file mcfonts.lst.

Double click on this file. If Windows asks what program to use to open this file, scroll down to Notepad and click OK.

Within the file will be several text entries like this example:

```
[Modified Roman]
dtafile = mr
fontfile = mcalf001
lowercase = no
serifs = no
```

Each group represents a different font and begins with the name of the font in square brackets. You need to make an entry in this file for your new font.

Select one group of five or so lines. Highlight them. Right click on them and left click on Copy. Scroll to the end of the file. Place the cursor after the last line of text. Press Enter twice to add space at the end.

Right click on the empty space at the bottom, and left click on Paste. The five lines you selected should be placed at the end of the file.

Modify Entry

You need to adjust the entry to match the name of your new font.

Between the square brackets type the name of the font as you want it to appear in the Advanced Kern dialog when adding lettering in Monu-CAD.

On the line “dtafile = ” type the name of your new spacing table (DTA) file.

On the line “fontfile = ” type the name of your new font (FNT) file.

If you created lower case letters in your new font enter “lowercase = yes” without the quotes, otherwise put “lowercase = no” without the quotes.

If you wish to limit the minimum size an alphabet can be used at, add the statement “smallest = ” and enter the smallest size in decimal inches.

If you did not create an alternate set of letters with exaggerated serifs (fat bars) to be used below a certain size letter, enter “serifs = no” without the quotes.

If you created the alphabet to use only one alternative alphabet with the F prefix, type “serifs = yes” without the quotes.

If you wish to use different punctuation instead of the default punctuation for the alternative alphabet, type “punctuation = new” without the quotes.

Here is an example entry:

```
[My New Font]
dtafile = new
fontfile = newfont
lowercase = no
serifs = no
```

After you have made your changes, left click on File and Save. Then left click on File and Exit.

Step 4: Test the Font

Start MONU-CAD.

Right click on the drawing screen and left click on Add Lettering.

The Advanced Kern Dialog window should open.

Type in the text you wish to appear on the screen.

Choose the name of your new font from the Primary Font option. Click OK.

Your lettering group using your new font should appear.

If the letters do not appear, or you receive an error message, double check the steps listed above.

Step 5: Adjust Spacing

Within MONU-CAD, left click on File and then Config.

Under the Kern tab, make sure the box next to Disable Save To DTA File Dialog is not checked.

Click OK and click Yes to save configuration to disk.

Start with a blank screen.

Place a lettering group on the screen using your new font.

Examine the lettering group you placed on the screen.

If the spacing between the letters needs to be adjusted, right click on the lettering group and choose Adjust Lettering.

Directions on how to use Adjust Lettering are located in the MONU-CAD help file.

It may be necessary to adjust the spacing of every combination of characters using this method.

A message will pop up and ask you if you want to save to DTA you need to say yes.