

DDV

USER MANUAL

for the

Transportation Special Railroad Symbol Set

Table of Contents

Requesting Additional Symbols	2
Required Files	2
Rail Crossing Protection Symbol Use	3
Railroad Block Signal Symbol Construction	3
Rail Crossing Protection Style Dump	5
Railroad Block Signals Style Dump	6
ArcView 3.x Installation Instructions	7
ArcGIS Desktop Installation Instructions	9
Troubleshooting	10

Created by:

Jim Mossman

Data Deja View

Geographic Information Systems Consultancy
and
Cartographic Services

2113 8th Street
Cody, WY 82414
phone: 307-587-6667
e-mail: ddvgis@attbi.com



New e-mail address: ddvgis@bresnan.net

Requesting Additional Symbols

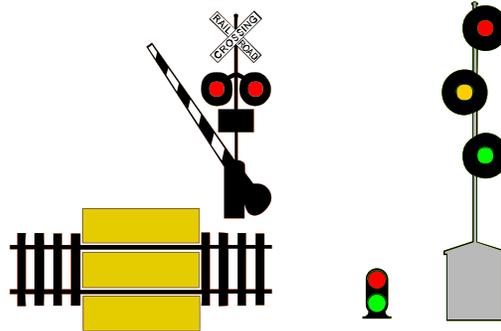
Over the years that Data Deja View (DDV) has been producing marker symbols, there has been surprisingly little feedback or requests for additional symbols. If users of existing symbol sets have additional symbol needs, DDV would appreciate such feedback. Symbol design ideas would be most welcome. Where a group of symbols is needed, it would be helpful to include a description of the data field(s) the symbols would be applied to and/or other symbol categorizations required. If DDV feels the symbols would have a sufficient user base, the request will be added to the work queue.

TRANSPORTATION **SPECIAL RAILROAD** SYMBOL SETS Marker Symbols by Data Deja View For ArcView 3.x and ArcGIS Desktop

Version "A" Created 01/15/04

This sets contains a total of **58** symbols:

26 Rail Crossing Protection Symbols
32 Railroad Block Signal Symbols



REQUIRED FILES

In order to use the Transportation Special Railroad Palettes and/or Styles, install the font files listed below.

Rail Crossing Protection Symbols:

FONTS	PALETTE (ArcView 3.x)	STYLE (ArcGIS Desktop)
DDV0024A.TTF	ddv0024a-Rail-Crossing-Protection.avp	ddv0024a Rail Crossing Protection.Style

Railroad Block Signal Symbols:

FONTS	PALETTE (ArcView 3.x)	STYLE (ArcGIS Desktop)
DDV0034A.TTF	ddv0034a-Railroad-Block-Signals.avp	ddv0034a Railroad Block Signals.Style

Rail Crossing Protection Symbol Use

Some of the Rail Crossing Protection Symbols lend themselves to representing two different attributes. The shape obviously shows the type of protection offered at a crossing (cross-bucks, red wig-wag lights, etc.). For those symbols showing the track crossing, the color of the crossing element can be used to represent the second attribute, which might be crossing surface material (wood, metal, etc.) or, as shown in the legend below, a categorization of train-automotive collisions.

Type of Protection:	RAIL CROSSING LEGEND				
	Very Good	Good	Poor	Bad	Very Bad
Unprotected Crossing Train Whistle Prohibited					
Unprotected Crossing Train Whistle Required					
Protected Crossing Cross Buck Signs Only					
Protected Crossing Manually Operated Gates Only					
Protected Crossing Automatic Lights and Bell					
Protected Crossing Automatic Gates and Lights					

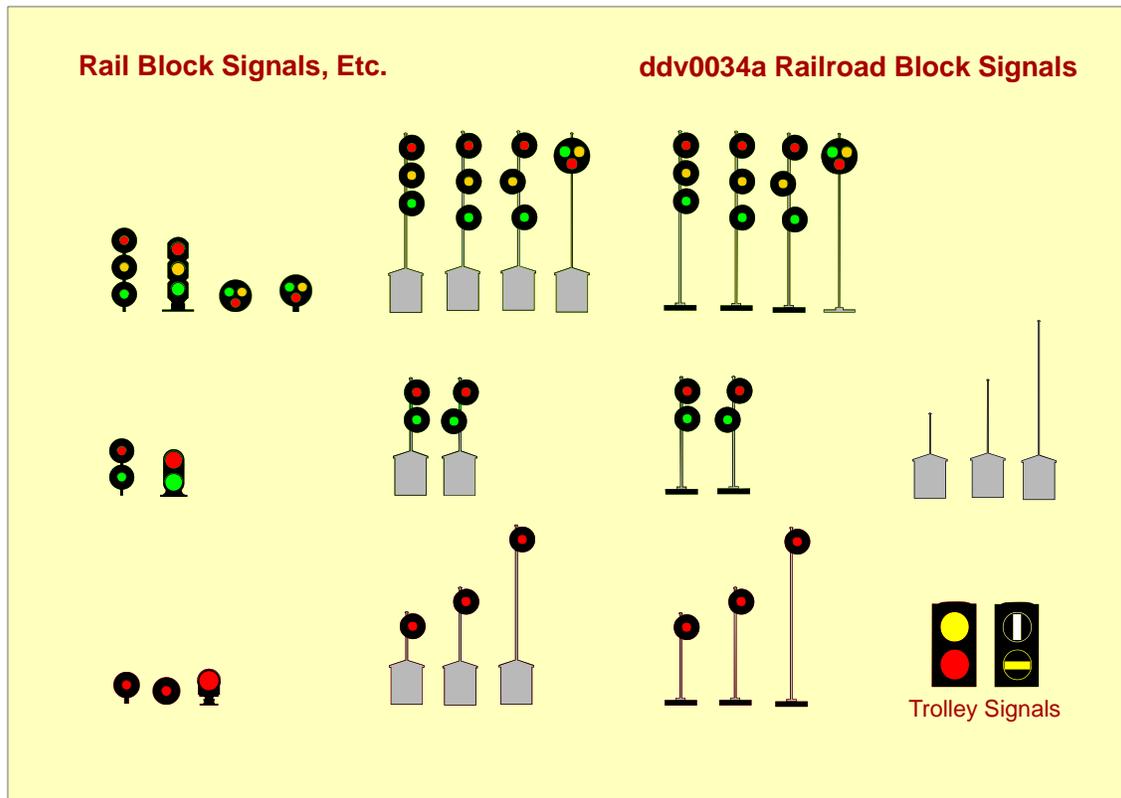
* a measure of safety in regard to train-vehicle collisions

Railroad Block Signal Symbol Construction

Most tall rail block signals include ladders, guard rail and service platforms. These details have been omitted from the symbols included here as they would not show up distinctly at typically used symbol sizes and would have required

significant time to construct. The symbols include only the essential identification elements.

The actual signal items depicted in the set vary widely in size and many are very high in relation to their width. Some of the resulting symbols are, therefore difficult to distinguish in the Style Manager or Palette Manager. In addition to the symbol dump, the illustration below shows most of the symbols re-sized to better depict their relative proportions.



ddv0024a Rail Crossing Protection Marker Styles



Trans Rail 101



Trans Rail 102



Trans Rail 103



Trans Rail 104



Trans Rail 105



Trans Rail 106



Trans Rail 107



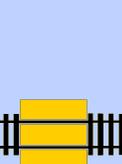
Trans Rail 108



Trans Rail 109



Trans Rail 110



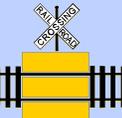
Trans Rail 111



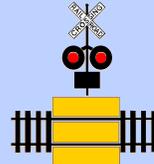
Trans Rail 112



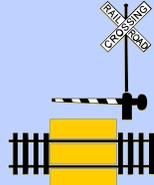
Trans Rail 113



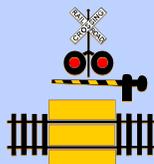
Trans Rail 114



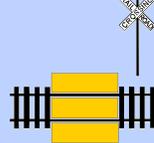
Trans Rail 115



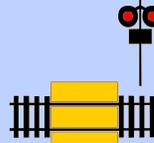
Trans Rail 116



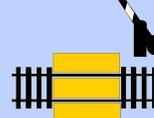
Trans Rail 117



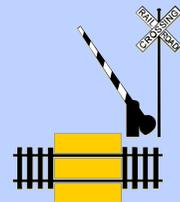
Trans Rail 118



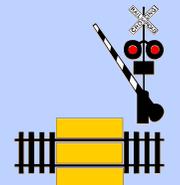
Trans Rail 119



Trans Rail 120



Trans Rail 121



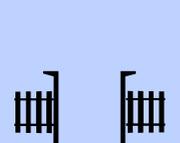
Trans Rail 122



Trans Rail 123



Trans Rail 124

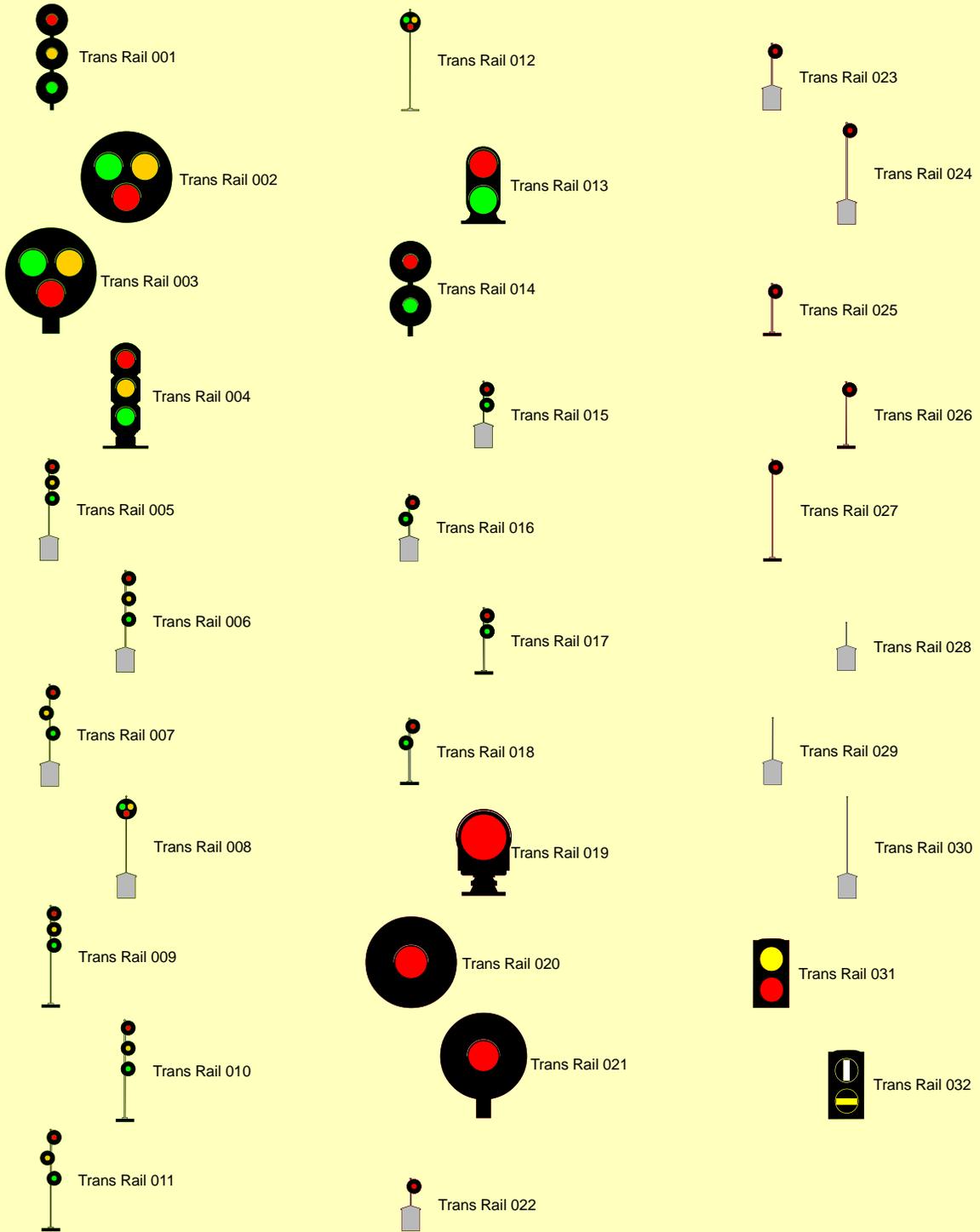


Trans Rail 125



Trans Rail 126

ddv0034a Railroad Block Signals Marker Styles



ArcView 3.x INSTALLATION INSTRUCTIONS

NOTE: These instructions assume you temporarily saved the WinZip file in your C:\TEMP directory and unzipped the files in that location. Substitute paths as appropriate to your system and file names according to the file set you received. Instructions assume a WIN 95, WIN 2000 or NT 4.0 installation (action with WIN XP should be similar). C:\TEMP should now contain the following:

After extraction there will be three classes of files:

TRUE TYPE FONTS: DDVxxxx.TTF Marker sets will always have at least one font and may have thirty or more. (e.g.: DDVCA01D.TTF, DDVMAP1B.TTF).

ARCVIEW PALETTES: DDVxxxx.AVP Marker sets will have four or more palettes.

XXinstall.DOC (or possibly .HTM or .PDF) – these instructions.

Note that \.....\ refers to the path where ArcView as installed. For example "D:\ESRI\AV_GIS31\ARCVIEW"

WINTEL PLATFORM =====

IMPORTANT: Make sure that ArcView is CLOSED before installing the fonts. Once Arcview is open, it doesn't recognize any newly loaded fonts until it is closed and then opened again. This may seem basic, but it has been the "gotcha" for lot of people.

STEP 1 INSTALL THE FONT - Navigate as follows:

Start -> Settings -> Control Panel -> Fonts -> File -> Install New Font

When prompted navigate to C:\TEMP and the names of the true type font(s) should appear. Select DDVxxxx (True Type). Also select the any other fonts included in this set of symbols. Press OK.

STEP 2 INSTALL THE PALETTE - Using Explorer or File Manager copy DDVxxxx.AVP to \.....\SYMBOLS.
STEP 3 LOAD PALETTE(S) - Now its okay to open ArcView. Load the palettes:

Window menu -> Show Symbol Window -> Palette Manager -> Load

This will invoke the Load Palette dialog. Navigate to \.....\SYMBOLS and select DDVxxxx.AVP. Don't worry if the load takes somewhat longer than for other palettes; that's normal.

The DDVxxxx symbols should now appear under Markers after any already loaded marker sets.

STEP 4 Use them ! ... and hopefully produce your Layouts a little more quickly.

NOTE: If you have installation problems, please refer to the Troubleshooting section below.

UNIX PLATFORM =====

Data Deja View has only tested markers on one UNIX platform. The good news is that the markers installed successfully. The bad news is that UNIX ArcView does not put together composite markers the same way as WinTel ArcView. Some layer misalignments may be so severe that the marker is not useable. Markers with all color layers about the same size don't seem to exhibit this problem and appear to be useable.

With DDV series Ila shield designs, users may now see a decrease in UNIX alignment problems.

IMPORTANT: Make sure that ArcView is CLOSED before installing the fonts. Once Arcview is open, it doesn't recognize any newly loaded fonts until it is closed and then opened again. This may seem basic, but it has been the "gotcha" for lot of people.

And as with all UNIX systems "Don't forget your permissions!"

STEP 1 - Copy all the fonts to the font directory under ArcView. In the system tested by DDV this directory path was:

```
/usr/esri/arcview3/fonts
```

STEP 2 - Copy all the palettes to the symbols directory under ArcView. In the tested system this directory path was:

```
/usr/esri/arcview3/symbols
```

STEP 3 - Edit the "font.ndx" file to add entries for the new fonts. In the tested system the path to this directory was:

```
/usr/esri/arcview3/etc/font.ndx
```

Sample entries used for two DDV fonts are as follows:

```
TRUETYPE 990004 $AVHOME/fonts/ddvhazib.ttf 990004
TRUETYPE ddvhaz1b
  NAME = ddvhaz1b
  FAMILY = ddvhaz1b
  STYLE = Normal
```

```
TRUETYPE 990005 $AVHOME/fonts/ddvvt01c.ttf 990005
TRUETYPE ddvvt01c
  NAME = ddvvt01c
  FAMILY = ddvvt01c
  STYLE = Normal
```

STEP 4 - Open up ArcView and hopefully enjoy (at least some) of these custom symbols.

NOTE: Some UNIX flavors may need additional coaxing and coddling. See your (hopefully friendly and available) UNIX administrators.

ArcGIS 8 Desktop INSTALLATION INSTRUCTIONS

After extraction there will be three classes of files:

- TRUE TYPE FONTS: DDVxxxxx.TTF Marker sets will always have at least one font and may have thirty or more. (e.g.: DDVCA01D.TTF, DDVMAP1B.TTF).
- STYLESETS: DDVxxxxx.Style Marker sets will have four or more style files.
- XXinstall.DOC (or possibly .HTM or .PDF) – these instructions.

WINTEL PLATFORM ONLY =====

IMPORTANT: Make sure that ArcGIS Desktop is CLOSED before installing the fonts. Once ArcGIS is open, it may not recognize newly loaded fonts until it is closed and then opened again.

STEP 1 INSTALL THE FONT(S) – ESRI font installation instructions indicate that ArcGIS will recognize all fonts placed in the system font folder (typically C:\WINNT\FONTS). Data Deja View has successfully used fonts placed elsewhere by installing them with Adobe Type Manager (ATM).

STEP 2 INSTALL THE STYLE(S) – The .Style files may be placed in any directory (folder).

STEP 3 LOAD STYLE(S) - Open ArcMap and navigate as follows to load styles.

Tools menu -> Styles -> Style Manager

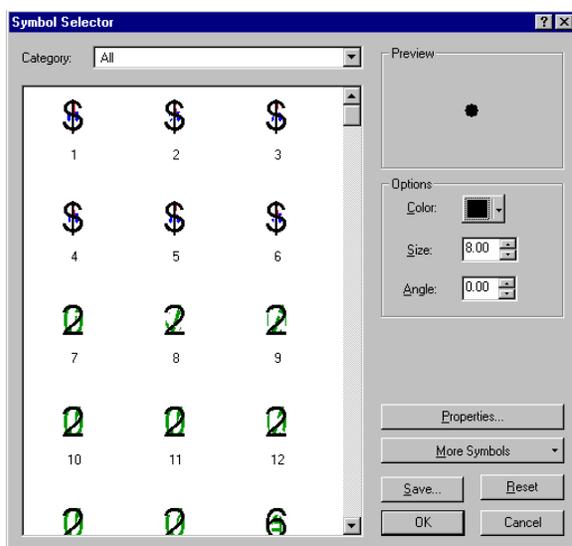
This will invoke the Style Manager window. In the upper right corner, click on the Styles button. From the drop down menu that appears, choose Add (near the bottom of the drop down). An Open dialog box appears. Use it to navigate to the directory where you placed the style files. Select the desired style and click on the Open button. The Style will now appear in the left hand window of the Style Manager, indicating that it is active in this ArcMAP session.

NOTE: If you have installation problems, please refer to the Troubleshooting section below.

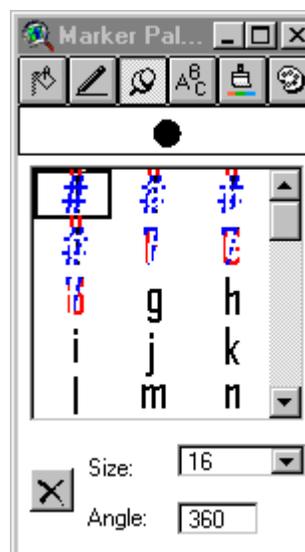
Troubleshooting:

Problems With Initial Installation: People frequently experience problems with font installation for ArcView 3.x and ArcGIS 8.x. This occurs with ESRI fonts, Data Deja View (DDV) fonts and other custom fonts and has been experienced in Win 95, Win 98, Win NT and Win2000. DDV fully expects to see the problem continue in Win XP. It is evidenced by alphanumeric and special character symbols appearing instead of the expected marker symbols (see examples below). In most cases the appearance of these “weird” characters is due to a failure of the Windows operating system to properly register the font(s).

Typical Appearance of Marker Symbols When Font Installation Problems Occur



ArcGIS 8.x Style Manager



ArcView 3.x Palette Manager

First Line of Troubleshooting: Make sure that ArcView 3.x and ArcGIS 8.x are closed. Then open up the Control Panel's Fonts folder and look to see if the fonts show up.

Start --> Control Panel --> Fonts

On slower machines you may sometimes notice that the fonts aren't there, but that the screen repaints and the missing fonts suddenly appear. Most of the time that this occurs, the fonts are now properly registered. However, on fast machines you probably won't have a chance to see whether they are there or not before the repaint is completed.

If the fonts (TTF files) are not there, try installing them using the Font folder's Install New Fonts option:

Fonts → File → Install New Fonts

If the fonts are there (or you are not sure whether they only appeared after a screen repaint), select and delete the font(s) and then install them again from the Font folder.

Now open up ArcView 3.x and/or ArcGIS 8.x and try loading the palette or style again. Chances are that things will now work properly.

Second Line of Troubleshooting: Check that you have the proper fonts for the palette/style series you are trying to use (refer to the lists included in this document). The font and palette versions must match. If you have only the fonts from an old marker set version installed and try to load the palette from a new version, the “weird” characters will show up (and vice versa).

E.g., installing DDVWY01B.TTF, DDVWY02B.TTF and DDVWY03B.TTF and then loading palette DDVWY01C.AVP won't work because they were generated from different updates and the palette is hard coded with the names of the fonts it expects to use.

Third Line of Troubleshooting: If there is another computer available to you with the appropriate software on it, try installing the fonts on that machine and see if the palette/style will load successfully there. If so, contact your system administrator or IT department for assistance. There is likely an operating system problem.

If You Still Can't Get Things to Work: Make note of what happened in the above troubleshooting steps and contact DDV, including this information. We will attempt to address any problems resulting from our end. In doing this we may ask you to send the fonts and palettes/styles that won't install back to DDV for analysis.

Other Troubleshooting Help: The ESRI online discussion groups, ArcView-L and ESRI-L have from time to time covered this topic and occasionally have found different causes and solutions. Please try looking back at older postings and/or in the archives before posting your own message. Seeing the same questions posted repeatedly does get rather old quickly.

The Magic Approach: Some time ago ESRI technical support indicated that some people were supposedly able to cure the problem by opening file manager or explorer and dragging the fonts to another directory and then immediately dragging them back again. (It's likely they were working with all fonts installed in the WINNT/FONTS directory or its equivalent in another Windows OS.) If you try this it might help to put a black cat on top of the monitor (then again it might not).

Markers Stop Working Properly: If marker sets that used to load successfully suddenly start to show up as “weird” characters, the font has somehow been deleted or lost registration on the system. Follow the above steps to correct the problem.

Avoiding Font Problems: If you start having problems with fonts, DDV recommends the use of Adobe Type Manager (ATM). This software is relatively inexpensive and has cured a number of font related problems at this site. Since starting to use ATM the only times that initial font registration problems have occurred here are when fonts failed to register properly when installed as part of a software installation (i.e.; the fonts were loaded by the application software, not through ATM).

ATM also cured interminable repainting of all on-screen icons and associated slow downs or hang-ups when the system already had a large number of fonts installed and Control Panel's font manager was used to install additional fonts.

DDV is not aware of anyone who has had font install problems while using ATM, but would appreciate hearing the circumstances surrounding any failures with its use.