

## Your ELSA *POWERdraft for AutoCAD R14* Driver

Please see the [README.TXT](#) file's last section **Updates to the Help file**. It may contain more recent information than this help file.

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### **Overview**

Seamlessly integrated into the AutoCAD environment, your *POWERdraft for AutoCAD R14* driver offers significant improvements over existing driver technology. First, your *POWERdraft* driver provides the fastest and most reliable platform available for AutoCAD. Proven 32 bit display list technology and an intimate knowledge of your ELSA graphics adapter combine to provide an excellent solution for the most demanding AutoCAD for Windows users.

Additionally, your *POWERdraft* driver includes powerful utilities, the *MagniView*, the *MultiView* and the *Cockpit*, each designed to accent the AutoCAD drafting environment without inhibiting it. Fully dynamic and integrated through ELSA's [SmartFocus](#) technology, each utility is fully transparent to AutoCAD and available during any AutoCAD command.

#### ***POWERdraft* [Cockpit](#)**

A tool without equal, the *Cockpit* offers dynamic zooming and panning of the current viewport with just a flick of the mouse, even while sized small enough to fit within the AutoCAD scrolling area. Shaped to resemble two joy sticks, adjusting your view is as easy as pick, drag and release. Through ELSA's [SmartFocus](#) technology, the *Cockpit* is completely transparent and fully dynamic, making it perfect for small adjustments to your view while editing.

#### ***POWERdraft* [MultiView](#)**

Enclosed within the *Cockpit* window, the *MultiView* offers a configurable visual history of previous views. Displaying a record of one to one hundred prior views, the *Multiview* represents each view visually on a button face. This gives instant access to any previous view and can be used to record and playback selected views consistently.

#### ***POWERdraft* [MagniView](#)**

Unique among spy glass" devices, the *MagniView* offers maximum functionality with a minimum size. ELSA's [SmartFocus](#) technology makes the *MagniView* completely modeless allowing the *MagniView* to update dynamically, tracking the AutoCAD cursor to display a "zoomed in" view of the editing area. This magnified view can aid the drafter in picking AutoCAD entities including grips and other editing artifacts, or in finding special information within the drawing.

#### ***POWERdraft* [Toolbar](#)**

The ELSA toolbar provides a convenient way to call some *POWERdraft* [commands](#).

For Help on Help, Press F1

## **POWERdraft Toolbar**

Some *POWERdraft* commands are easily accessible via the *POWERdraft* toolbar. At the first start of *POWERdraft* the toolbar opens automatically.

**When the ELSA *POWERdraft* toolbar is closed, you can open it again via the [PdMenu](#) command or a mouse click on the ELSA logo in the Cockpit window. If this doesn't help, use the command [PdMenuOn](#).**

The toolbar has the following buttons:



Opens/closes the [Cockpit](#) - equivalent to command **PdCockpit**



Opens/closes the [MagniView](#) - equivalent to command **PdMagniView**



Opens the ELSA [POWERdraft Settings](#) - equivalent to command **PdConfig (\*)**




Invokes windows help about ELSA *POWERdraft for AutoCAD R14* - equivalent to command **PdHelp**

These and other *POWERdraft* commands are described in section [Commands](#).

## ***MagniView***

### **Overview**

To open the *POWERdraft MagniView*, the [command PdMagniView](#) or the MagniView icon  in the ELSA [toolbar](#) may be used (if the toolbar is closed, you can re-open it via the [PdMenu](#) or [PdMenuOn](#) command). Once opened the *MagniView* will track AutoCAD's cursor in the current viewport updating its display dynamically. The *MagniView* displays the current magnification factor in an editable text field. Edit this text field to set the magnification factor to specific values.

Another way to set the **magnification factor** is the slider at the bottom of *MagniView's* window. Manipulating the slider will change the magnification factor used by the *MagniView*, the text field immediately displays the numerical value.

To set a specific magnification factor you can use the [command "PdMvSet<fac>"](#); e.g. to set a factor of 3.5 type "PdMvSet3.5"

The *MagniView* magnification factor may be set **GLOBAL** or **LOCAL**. Using **LOCAL** mode allows the *MagniView* to use different magnification factors in each AutoCAD viewport, updating as the current viewport is changed. In **GLOBAL** mode the current magnification level is used in all open viewports. The mode may be toggled by double clicking in the mode field of the *MagniView's* status bar.

### **MagniView's Window**


The *MagniView's* window titlebar may be toggled off by **double clicking the right mouse button** anywhere in the display area. Double clicking again will re-enable the disabled titlebar. **Turning off the titlebar** will give extra room for the *MagniView's* display. The window can be moved by dragging the display area. Double clicking the left mouse button over the green rectangle will close *MagniView*.

### **Configuration**

The *MagniView* has some configurable options that can be set in the [POWERdraft Settings](#). A complete description can be found on the corresponding help page.

# Cockpit

## Overview

To open the *POWERdraft Cockpit*, use the **PdCockpit** [command](#) or the *Cockpit* icon  in the ELSA [toolbar](#) (if the toolbar is closed, you can re-open it via the [PdMenu](#) or [PdMenuOn](#) command). Once opened, the *Cockpit* offers two "joy stick" like devices and a slider. If enabled, the *MultiView* is also included in the *Cockpit's* window. The two "joy sticks" are used for zooming and panning the current AutoCAD viewport. This tool can be especially valuable on screens with little room to spare as it offers full dynamic zooming and panning functionality in a compact space.

Furthermore there is a configurable **remote control** for the joy sticks. Using this feature, you need not move the mouse cursor above the *Cockpit* window, since zooming and panning can be activated via the keyboard. The remote control function is only available, when the *Cockpit* window is open with the sticks enabled.

## Dynamic Panning

To **pan** the current viewport, simply select the knob of the two dimensional joy stick and drag. The current viewport will pan in the direction of your drag at a speed proportional to angle your drag. The farther the joy stick handle is "depressed" the faster the viewport will pan.

**Remote Control:** To pan the current viewport via remote control, press the configured key combination (e.g. <Ctrl> and <Shift>) and the configured mouse button (e.g. <left mouse button>) in the viewport window. Now by moving the mouse you can pan, until the mouse button is released (you do need not to hold the key combination while panning).

The preferred key/mouse button combination for remote control can be set in the [POWERdraft Settings](#).

## Dynamic Zooming

To **Zoom** the current viewport, simply select the knob of the smaller, one dimensional joy stick and drag. Depressing the joy stick upwards will zoom deeper into the current view, pulling back on the stick will zoom out. The speed of the dynamic zoom is proportional to the depression of the joy stick.

**Remote Control:** To zoom the current viewport via remote control, press the configured key combination (e.g. <Ctrl> and <Shift>) and the configured mouse button (e.g. <right mouse button>) in the viewport window. Now by moving the mouse you can zoom, until the mouse button is released (you do need not to hold the key combination while zooming).

Zooming via remote control has a **special feature** (in contrast to zooming directly in the *Cockpit* window): The current cursor position is used as "zoom point" (fix point), i.e. you zoom into this point or out of it. So the view center point changes while zooming. When zooming directly in the *Cockpit* window, the zoom point is always the view center point, so the center point is fixed.

The preferred key/mouse button combination for remote control can be set in the [POWERdraft Settings](#).

## Acceleration

To **adjust the speed** range available when zooming and panning, set the knob of the acceleration slider. The lower the knob, the lower the increment that the joy sticks will use to zoom or pan the view.

Additionally, you can adjust the speed range for zooming and panning independently from each other via the two entries **Zoom** and **Pan** of the **Sensitivity** group within the [POWERdraft Settings](#). Normally there is no need to change these factors.

## Cockpit's Window

The *Cockpit's* window titlebar may be toggled on by **double clicking** the **right mouse button** on the ELSA logo. Double clicking again will hide the titlebar. **Turning off the titlebar** will give extra room for the *Cockpit's* display. If the window titlebar is enabled, it may be used to **move** or **close** the *Cockpit*. With the

titlebar disabled, you can move it by dragging the ELSA logo. A double click of the left mouse button on the green rectangle will close the *Cockpit*.

## **Configuration**

The *Cockpit* has some configurable options that can be set in the **POWERdraft Settings**. A complete description can be found on the corresponding help page.

# MultiView

## Overview

An element of the *Cockpit* display, the *MultiView* view history array offers a selection of prior views for recall. Each button holds a visual representation of the view that it would recall. The number of views stored is configurable via the POWERdraft Settings. Recalling any view displayed by the *MultiView* is as simple as picking the desired view. That view will be sent to the current AutoCAD viewport.

**Fix Button:** The fix button is below the *MultiView* area left to the help button. When turned **off**, every view change (e.g. via Zoom or Pan) will automatically save the last view to the history array. When turned **on**, *MultiView* is "frozen", i.e. no new views are saved. Opening the *Cockpit* or a new drawing will automatically turn the fix button off.

Additionally there are the commands **PdCpFix** (turning fix button on/off) and **PdCpAddView** (saving the actual view to the history array). With these commands you can write a script, that generates a sequence of views in the history array and freezes them. (see section [Commands](#)).

There are some Icons below the *MultiView*:



*MultiView* is frozen (fix button on) (equivalent to command [PdCpFix](#))



*MultiView* stores new views (fix button is off) (equivalent to command [PdCpFix](#))



*MultiView* stores the actual view if not already stored (equivalent to command [PdCpAddView](#))

## Configuration

The *MultiView* has some configurable options that can be set in the POWERdraft Settings. A complete description can be found on the corresponding help page.

## **SmartFocus**

ELSA's SmartFocus technology, used in all POWERdraft windows, eliminates the switching of Windows input focus between POWERdraft utilities and AutoCAD's drafting window. After having used a function in one of the utilities, keyboard input or cross hair movements will make AutoCAD's window the active window immediately. An explicit click as in other drivers is not required.

## **Grip Frame**

A grip frame is a colored rectangular frame used to describe a view. It has three separate functional areas, inside the rectangle, on the rectangle itself, and outside the rectangle. A grip frame may typically be resized by picking and dragging the frame much like a Windows window. Other functionality offered depends on the view the grip frame represents.



# Installation

The driver supports **AutoCAD R14** under **Windows NT3.51/4.0** and **Windows 95**.

## Requirements

To install the ELSA *POWERdraft* driver you need:

- AutoCAD R14 already installed.
- Microsoft Windows NT 3.51/4.0 or Windows 95
- ELSA WINNER or GLoria graphics controller - see the header of the [README.TXT](#) for list of supported ELSA graphic cards
- ELSA's display driver for the used Windows version
- CD "*WINNERware*" or floppy disk "*POWERdraft for AutoCAD R14*"

## Installation

- **Installation from CD:** Start CDSETUP.EXE in the root directory of your WINNERware CD. You can double click CDSETUP.EXE in the File Manager or Windows Explorer.
  - **Installation from floppy disk:** *POWERdraft* installation set consists of two floppy disks. Start SETUP.EXE from the first one. During installation you will be requested to insert the second disk.
  - **Installation from a separate directory:** The *POWERdraft* directory contains two subdirectories: DISK1 and DISK2. Start SETUP.EXE in subdirectory DISK1.
  
  - The driver will be installed in a separate driver directory.
  - SETUP creates a program group containing four icons:
    - ***POWERdraft Help***: Invokes this help file.
    - ***Configure POWERdraft***: Configures *POWERdraft* as AutoCAD's display driver.
    - ***Configure Original Driver***: Configures AutoCAD's original display driver (CoolWhip).
    - ***Uninstall POWERdraft***: Removes *POWERdraft* from the system.
- NOTE:** The two ***Configure...*** icons only work while AutoCAD is **not** running.

## Access Rights

At **setup time** SETUP needs write access to the following directories:

- AutoCAD directory: SETUP generates the file PD14PATH.INI, which holds the driver path, here.
- Driver directory: SETUP copies almost all *POWERdraft* files to here.
- Windows System directory: SETUP copies the ELSA *POWERlib* files to here.
- Windows directory: SETUP generates the file DSELSA14.INI, which holds the *POWERdraft* settings, here

At **execution time** *POWERdraft* needs write access to the following directories:

- Driver directory
- Windows directory: *POWERdraft* updates its settings in DSELSA14.INI when it finishes

At **configuration time** the configuration utility needs write access to the following directory:

- AutoCAD directory: The display driver configuration (*POWERdraft* / AutoCAD's original display driver) is changed by exchanging the display driver dll DSWHIP.DLL

### NOTE :

The driver is based on ELSA's *POWERlib*, a driver independent, fast graphics library. Since other applications and drivers use it, this component may already be installed on your system. In the unlikely event of an incompatibility with an existing *POWERlib*, the SETUP will inform you and let you decide whether to continue the installation or abort. The SETUP program will show the names of the applications which will be affected if you continue the installation.

## Commands


*POWERdraft* for *AutoCAD* defines additional Commands to be used in *AutoCAD*.

<b>PdCockpit[0 1]</b>	Opens/Closes the <u>Cockpit</u> <b>Optional Parameters:</b> <b>0</b> : opens Cockpit <b>1</b> : closes Cockpit none: toggles Cockpit
<b>PdConfig</b>	Opens the <u>POWERdraft Settings</u> to change <i>POWERdraft</i> settings.
<b>PdCpAddView</b> (Cockpit command (*))	Saves the actual view to the history array of <u>MultiView</u> , unless the actual view has already been saved.
<b>PdCpFix[0 1]</b> (Cockpit command (*))	Sets the fix button for <u>MultiView</u> in the <i>Cockpit</i> window. <b>Optional Parameters:</b> <b>0</b> : turns fix button off <b>1</b> : turns fix button on (freezes <i>MultiView</i> ) none: toggles fix button
<b>PdHelp</b>	Invokes windows help about ELSA <i>POWERdraft</i> .
<b>PdMagniView[0 1]</b>	Opens/Closes the <u>MagniView</u> <b>Optional Parameters:</b> <b>0</b> : opens MagniView <b>1</b> : closes MagniView none: toggles MagniView
<b>PdMenuOn</b>	same as <b>PdMenu</b> except that the ELSA toolbar will be positioned in the center of <i>AutoCAD</i> 's drawing area. This is useful e.g. when the ELSA toolbar was shifted out of the visible area by docking other toolbars.
<b>PdMvSetm.n</b>	Sets the factor <b>m.n</b> as the new magnification factor for <i>MagniView</i> .
<b>PdVer</b>	prints the version number of <i>POWERdraft</i> in <i>AutoCAD</i> 's text window

(\*) these commands are only available, if the corresponding tool is open.

## POWERdraft Settings

The **POWERdraft Settings** offer a comfortable way to configure your *POWERdraft* driver and all the tools delivered with it. Changes made to your configuration become valid at run time.

To open the *POWERdraft Settings* simply type the **command PdConfig** to AutoCADs command line or alternative click the corresponding button  within the *POWERdraft toolbar* (if the toolbar is closed, you can re-open it via the **PdMenu** or **PdMenuOn** command).

The *POWERdraft Settings* are divided into three pages. Use the **General** page to configure driver related options. Choose the **Cockpit** page or the **MagniView** page to adjust settings related to the *Cockpit* or *MagniView* resp.. Each page can be activated by clicking the corresponding tab control at the head of each page. All pages contain a **Default** button to quickly fetch back the default settings. Click on **OK** to make the new settings become valid. Click on **Cancel** to dismiss the changes you've made.

**NOTE:** The settings will be written to the file **dselsa14.ini** in your Windows directory. Do not edit **dselsa14.ini** while the driver is running, as the driver will overwrite your changes when it terminates.

**NOTE:** In **dselsa14.ini**, do not change any other entries than documented below.

Currently available settings in **dselsa14.ini** are:

<b>description</b>	<b>section</b>	<b>value</b>	<b>default value</b>
<b>Cockpit On</b>	[POWERdraft]	Cockpit (0, 1)	1
<b>Titlebar</b>	[Cockpit]	Caption (0, 1)	0
<b>MultiView</b>	[Cockpit]	History (0, 1)	1
<b>MultiView Rows x Columns</b>	[Cockpit]	HistorySize (1,1 .. 10,10)	4,3
<b>Pan &amp; Zoom Sticks</b>	[Cockpit]	Sticks (0, 1)	1
<b>Pan Sensitivity Factor</b>	[Cockpit]	PanFactor (1 .. 999)	50
<b>Zoom Sensitivity Factor</b>	[Cockpit]	ZoomFactor (1 .. 999)	100
<b>Enable Remote Control for Pan &amp; Zoom Sticks</b>	[Cockpit]	RemoteControl (0, 1)	1
<b>Remote Key for Pan</b>	[Cockpit]	RemotePan (*)	2817 (*)
<b>Remote Key for Zoom</b>	[Cockpit]	RemoteZoom (*)	2818 (*)
<b>Remote Key for Sensitivity</b>	[Cockpit]	RemoteAccelerate (*)	2832 (*)
<b>MagniView On</b>	[POWERdraft]	MagniView (0, 1)	0
<b>Titlebar</b>	[MagniView]	Caption (0, 1)	0
<b>Magnification</b>	[MagniView]	MagLevel (1.0 .. 99.99)	1.0

(\*) : available Remote keys:

	<b>left mouse button</b>	<b>middle mouse button</b>	<b>right mouse button</b>
<b>Shift</b>	2305	2320	2306
<b>Ctrl</b>	2561	2576	2562
<b>Shift+Ctrl</b>	2817	2832	2818
<b>Alt</b>	3073	3088	3074
<b>Shift+Alt</b>	3329	3344	3330
<b>Ctrl+Alt</b>	3585	3600	3586
<b>Shift+Ctrl+Alt</b>	3841	3856	3842
<b>disabled</b>	0		

## POWERdraft Settings: *General*

### Driver Version

This field holds the current version of your *POWERdraft* driver.

The **Display Update** offers three possible settings.

- If **Immediate** is checked, the driver will update the display when ever AutoCAD sends a corresponding command to the driver. With non interactive command sequences like scripts etc., this state may result in a lost of performance.
- The **Optimized** state ensures an optimal adjustment of performance and display updates with non interactive command sequences.
- The **Zoom & Pan** state forces a display update on every zoom and pan action. Otherwise this state is equivalent to the **Optimized** state.

While working interactive, all states are equivalent. **Zoom & Pan** is checked for default.

The **Tools** group offers the possibility to enable or disable several tools deliverd with your *POWERdraft* driver. The **Cockpit** tool is devided into two components.

- The **Sticks** offer dynamic zooming and panning of the current viewport and
- the **MultiView** offers a configurable visual history of previous views.

Sticks and *MultiView* can be aktivated or deaktivated separately. Check **MagniView** to enable *POWERdrafts* spy glass.

The **Hotkey Control** offers a comfortable way to assign a suitable key combination to a given action. To do so, select the corresponding **Action** and afterwards type the desired key combination to the **Hotkey** field. Some special actions expect an additional factor. For example, a pan action expects a **Pan Offset** and a zoom action expects a **Zoom Factor**. See the default key combinations listed below.

Action	Keycombination	Factor
pan down	<Alt><down>	Pan Offset = 0.25
pan left	<Alt><left>	Pan Offset = 0.25
pan right	<Alt><right>	Pan Offset = 0.25
pan up	<Alt><up>	Pan Offset = 0.25
redraw all	<Shift><F2>	-
zoom in	<Shift><F3>	Zoom Factor = 1.5
zoom out	<Shift><F4>	Zoom Factor = 1.5

**Note:** If a chosen key combination has a function in AutoCAD, then this function won't be available any more.

## POWERdraft Settings: *Cockpit* / *MultiView*

Via the **Look & Feel** group the user can change the appearance of the *Cockpit* tool.

- The **Titlebar** can be enabled for ease moving and closing or it can be disabled to preserve display space.
- The **Styles** field offers comfortable switching between several *Cockpit* styles

For the *Cockpit Sticks* there are some additional configurable options.

- **Reverse the Pan Direction** if you want your drawing to move to the same direction the pan stick points to. For default your drawing moves to the opposite direction the pan stick points to.
- Adjust the **Sensitivity** factor separate for pan and zoom operations. The default factor is 50 for pan and 100 for zoom, resp.. Generally, the sensitivity factor ranges between 1 and 999.
- **Remote Control** for pan & zoom sticks can be turned on or off. It's available only if the pan & zoom sticks are enabled. The default key/mouse button combination to activate remote control can be changed by switching to the hotkey field of the specified operation (Pan, Zoom, Sensitivity) you want to change the key/mouse button combination for. Then type the desired key combination together with the desired mouse button or one of the keys <L>, <R> or <M>, which identify the **Left**, **Right** or **Middle** mouse button, resp.. See the default key/mouse button combinations below.

Pan	<Ctrl><Shift><LeftMouseButton>
Zoom	<Ctrl><Shift><RightMouseButton>
Sensitivity	<Ctrl><Shift><MiddleMouseButton>

**Note:** If a key/mouse button combination chosen for remote control has a function in AutoCAD, then this function won't be available any more.

If **MultiView** is enabled, two edit fields allow you to change the number of button **Rows** and **Columns** for the History view.

Please refer to the sections [Cockpit](#) and [MultiView](#) for a general description of these features.

## Configuration: *MagniView*

The **Titlebar** can be enabled for ease moving and closing or it can be disabled to preserve display space.

You can preset the magnification factor used by the *MagniView*. The *MagniView* magnification factor may be set **GLOBAL** or **LOCAL**. Using **LOCAL** mode allows the *MagniView* to use different magnification factors in each AutoCAD viewport, updating as the current viewport is changed. In **GLOBAL** mode the current magnification level is used in all open viewports.

Please refer to the section [\*MagniView\*](#) for a general description of this feature.

# Version Report / Latest revisions

## Version History

### Version 14.00(beta)

#### 14.00.00(beta)

- first Beta Release (speed only release)

#### 14.00.02(beta)

- Crashes with Genius are fixed.

#### 14.00.05(beta)

- implemented Cockpit with remote control
- implemented MultiView; now MultiView is able to handle non-perspective 3D views
- Problems with AutoSnap are fixed.
- Fixed: The cursor wasn't cleared properly on multi processor systems.

#### 14.00.06(beta)

- Now POWERdraft will be installed in a separate driver directory (no longer in the AutoCAD directory)
- For ease manipulating driver/tool settings, the [POWERdraft Settings](#) have been implemented.
- Hotkeys for Pan & Zoom and redraw all. These are configurable via the [POWERdraft Settings](#).
- Display errors with Genius PowerSnap have been fixed.
- MultiView has been revised regarding its functionality.
- A crash with AMD 2.0 has been fixed.

#### 14.00.07(beta)

- A regen following a pan or zoom operation on raster images left behind a kind of *ghost images* among the real images. This problem has been fixed.
- The POWERdraft Settings have been revised.

#### 14.00.08(beta)

- Fixed a crash with Genius standard components.
- Improved the behaviour of Pan/Zoom via the Cockpit.
- The Cockpit got a new look.
- Windows 95 is supported.

#### 14.00.09(beta)

- ELSA GLoria-XXL is supported.

### **Version 14.01**

#### 14.01.00

- Fixed problems with the preview, which is saved within the .DWG file:
  - Now in the "Open" dialog the quality of the preview is much better.
  - Non-drawing elements are not part of the preview any more.
  - Now the file size is much less.To fix these problems with a drawing saved with an older version of POWERdraft (V14.00.xx(beta)), you may save this drawing again after calling AutoCAD's command PURGE, which will reduce the file size to a normal level.

#### 14.01.01

- The *Cockpit* now performs dynamic zooming and panning also for models in paperspace.
- Fully support of subentities. As a consequence of this item, a problem with marking sketch planes has been solved.

#### 14.01.02

- A problem with wrong colors on hidden layers has been fixed.
- Shaded entities have not ever been removed correctly. This problem has been fixed.

### **Version 14.02**

#### 14.02.00(beta)

- Instabilities under AMD + Genius are fixed.
- Fixed startup problems with some Arx applications.
- Highlight/Select operations became faster and need less memory.
- Fixed: Drawing entities were drawn top of a rendered scene.

#### 14.02.01(beta)

- Eliminated occasional regen requests after totally zooming out via cockpit.
- The hotkey functions "zoom in" and "zoom out" changed; now the cursor position is used as zoom fix point, whereas the new new hotkey functions "zoom in center" and "zoom out center" take the viewport's center point as zoom fix point.
- The new hotkey function "pan to center" pans the view from the current cursor position to the viewport's center point.

#### 14.02.02(beta)

- MagniView - POWERdraft's spy glass - has been implemented.

#### 14.02.03(beta)

- A problem with damaged POWERdraft Settings under Windows NT 3.51 has been solved.
- The POWERdraft Settings have been expanded by a new property page allow for MagniView settings.
- Now the preview bitmap (stored within the .DWG file) includes all entities (prior versions of POWERdraft didn't include TT fonts and raster images).

#### 14.02.04(beta)

- Display errors with Genius' shaft generator have been fixed.
- Layer operations have been fixed.
- TT fonts and raster images now will be displayed correctly within the print preview.
- Viewport border flickering now will be avoided in most cases.
- Fixed: moving viewports in paperspace sometimes left garbage on screen.
- The SAVEIMG command is fully supported.
- Instabilities with COPYCLIP, EXPORT WMF and EXPORT DWF have been fixed. Nevertheless, these commands are not fully supported yet.

#### 14.02.06

- A problem with ELSAview 3D's in-viewport-feature is fixed with v1.03.08 (or higher) of ELSAview. MultiView did not restore history views while render mode was active.

#### 14.02.07

- Deadlocks on multi processor systems are fixed.
- No more flickering while resizing the *MagniView* window.

### **Known Problems and Restrictions**

- TT fonts as well as raster images will always be drawn beneath the remaining graphics.
- TT fonts as well as raster images will not be displayed within the Aerial View window.
- AutoCAD's Clipboard functionality is not yet supported fully.
- When POWERdraft gets started, the error message "Unable to load menu: ... MNELS14.MNS " "A menu with that MENUGROUP name already exists" may occur. That message can be ignored.
- With the use of raster images and TT fonts the background color may become slightly falsified.



- Together with OpenGL applications, e.g. Autodesk Mechanical Desktop, display errors may occur. So far, these errors have been observed on a GLoria-XL board only. Such kind of errors can be suppressed by turning on the 'Force Buffer Blit' option within the 'GLoria Settings'. At runtime the display can be repaired immediate by pressing the hotkey for the redraw action, <shift><F2> for default.
- After uninstalling POWERdraft, an empty driver directory is left.
- During some commands (PLINE, MLINE, SPLINE) MultiView views cannot be recalled.
- With 8bpp the preview bitmap stored within the .DWG file has wrong colors.
- The contents of viewports in paperspace will not be displayed by *MagniView*.
- TT fonts and raster images will not be displayed by *MagniView*.

