

# D9061 Fire Graphics Display Software

Design Guide

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# **Design Guide**

# 1.0 Introduction

With the D9061 Fire Graphics Display Software, a multi-level picture representation of a site or building can be created for the purpose of defining the location of fire detection equipment. This fire equipment can also be monitored and controlled by the D9061 Fire Graphics Display Software.

The D9061 software runs under the Windows 95 operating system, and it requires a high performance PC (for example, one with an Intel Pentium processor), 16 MB of memory, a video card with at least 2 MB of memory and a spare communications port. The screen resolution should be set to 600 x 800.

# 2.0 D9061 Software Installation

The following set of instructions explains how to install the D9061 software:

- 1) Place the disk marked Number 1 into the disk drive and double click the "My Computer" icon.
- 2) Double click the Floppy A: drive icon and browse the files for the SETUP.EXE icon. Double click this icon.

Once the installation is complete, a program group called MEFS Graphics is created. Leave the last floppy disk in the drive, and allow the installer to reboot the system. The software will then be ready to use.

The MEFS Graphics program group contains four program icons: Design, Setup, Run and Uninstall.

If a previous version of this software has already been installed, it should be uninstalled prior to running the above installation. Choose Uninstall from the MEFS Graphics program group.

If projects have already been created with an earlier version of this software, load and save them with the Design software to retain compatibility.

# 3.0 Design Environment

# 3.1 General Information

Fire/hazard monitoring applications may need several screens of graphics pictures to provide sufficient detail of a site. The picture system is organized such that the first picture drawn is always the top level or site plan representation of an application.

Once the site plan has been created with the drawing tools or by importing bitmap or meta-files, a solid image (for example, a rectangle, polygon, circle, etc.) can be drawn, selected and defined to give access to a new screen containing the next level of detail. The image should indicate an area of interest on the site. The user can then move down to the next screen and begin creating a more detailed picture of the selected area represented on the site plan. In this way, more and more detail can be added as deeper levels of screens are created. Images that give access to other screens are called **sub-screen images**. The lower level screens are where the fire alarm device images will normally be placed.

To run the design program, click **Start** on the task bar, select **Programs ç MEFS Graphics**, then choose **Design** from the program group.



#### Figure 1: Overview of Drawing Levels

#### 3.2 The Design Procedure

The procedure for creating a structured collection of drawings to fully represent a given site can be quite complex. Creating the first design is always the most difficult part. The next design will be easier due to the experience gained. The following guidelines offer helpful pointers to ensure that the first design has a good start.

#### 3.2.1 The Site Plan (or Top Level Picture)

The first drawing to be created in any project is always the site plan. This is the drawing most often seen by the end user, and it is worth spending some extra time making this drawing as presentable as possible.

#### 3.2.2 Multi-Story Buildings

These drawings can be represented at the **second level** as either a side elevation or as a series of small floor plan images. Multi-story buildings will normally require drawings to at least Level 3 before sufficient details are available to place fire alarm detector images.

It is possible to use a side elevation to display a building at Level 2. If this is done, draw sub-screen images to outline the various floors (or parts of floors) on the elevation. These images will then be used to access more detailed floor plan drawings at Level 3.

If a number of floor plans are displayed to show a building at Level 2, then create sub-screen images to gain access to more detailed floor plans on the next level.

#### 3.2.3 Partitioned Sub-screens

Images of buildings on the site will lead to more detailed views at Level 2. If the image of a building on the site plan is quite large, consider drawing more than one sub-screen image over different parts of it so that Level 2 drawings can be larger, and more detailed, while providing user access to the relevant partition, or area, of the building.

Partitioning applies not only to the site plan, but also to drawings at any level where a given image is large enough to be partitioned with more than one sub-screen image. For example, Figure 2 depicts a Level 2 plan view showing three floor plans of a very large multi-story building. The images here are quite large on the screen, but a single sub-screen image for each floor plan would not provide sufficient detail on a Level 3 drawing to allow alarm devices to be placed. Both Level 3 and Level 4 drawings would therefore be required.



#### Figure 2: Level 2 Plan View of Three Floor Plans

For applications with large buildings, it is inevitable that at some point floor plans will require partitioning so that lower level screens can have enough detail to show the exact location of alarm images. Therefore, each of the floor plans shown in Figure 2 could be partitioned so that the next level will contain sufficient detail to add alarms.



#### Figure 3: Partitioned Sub-Screens

If the Level 3 drawings are still not of sufficient detail, then they too can be partitioned further so that more detail can be provided at Level 4.

#### 3.2.4 The Overall Picture System

Inspect the site plan and identify the building(s) as being either single or multi-story. Decide for each building how many drawing levels will be needed before arriving at sufficient detail to place fire detection images.

Keep in mind that the overall picture system must allow easy navigation by the end user with a mouse or touch screen. Each sub-screen image gives access to another screen, and the drawing must be a good representation of the area selected.

No limit is placed on the depth of levels or the number of screens created. However, navigation of the picture system by the user at run time and during auto-scroll operation will take longer for designs with a large number of levels.

#### A typical design for a large site will usually require a picture system with between three and five levels.

#### 3.2.5 Colors

At run-time, sub-screen images will automatically be highlighted when associated with an alarm condition, so avoid choosing line colors for sub-screen images which clash with those used for highlighting alarm conditions.

#### 3.2.6 CAD Drawings

When CAD drawings exist, arrange to get them exported from the CAD system in Windows meta-file format. This format is most easily re-scaled without loss of information and file sizes will in general be smaller for complex drawings.

If a particular part of a CAD drawing is to be used in the design, use the CAD system to cut out the area of interest and then export it in meta-file format. Again, this will keep the file sizes small and make the image much easier to handle and resize when importing into the graphics project.

#### 3.2.7 Sub-Screen Images

When a sub-screen image is to be drawn over an imported bitmap or meta-file, select its fill style property to be "empty" so that the background images underneath can still be seen. Very small sub-screen images should be avoided because they will be difficult to select when navigating the picture system and will be unnoticeable when in an alarm state.

If a site plan contains individual or groups of small building images, draw a sub-screen outline image which is larger than and provides a border around the smaller building image(s). These images can be expanded at the next picture level to provide more detail.

#### 3.2.8 Fire Alarm Devices

Always plan the full picture system first because this is the most important and also the most difficult part of the design. Fire alarm systems can be added to the lower level drawings once the picture system is satisfactory.

Always leave the fire alarm devices until last when designing the full picture system.

# 3.3 The Design Screen



Following Figure 4 is a description of the Design Screen.

#### Figure 4: The Design Screen

The main areas of interest on the design screen are as follows:

- Project Title: The Project Title indicates the name of the current project open for editing.
- Menu Bar: The Menu Bar provides access to various functions such as file access and image editing operations.
- **Drawing Area:** The Drawing Area is where graphic images are created and manipulated.
- **Drawing Tools:** The Drawing Tools are used for the creation of rectangles, ellipses, poly-lines, etc. all images are created with the default color and style attributes.
- Undo/Redo: These buttons are used to undo/redo moved or deleted images.
- **Top/Bottom:** As images are created, they are laid down on the drawing area in the order that they are drawn. The most recently drawn image may obscure other images. Use these buttons to change the order of selected images.
- Edit Font: The Edit Font Button activates a font dialog box to allow the attributes of currently selected text to be changed.
- Edit Color: This button activates a color/style box to allow the attributes of currently selected images to be changed.
- **Sub-screen:** This button creates a new sub-screen and associates it with the currently selected image.
- New Device: This button places a new device image (call point, smoke detector, etc.) on the drawing area.
- New Panel: This button places a new control panel image on the drawing area. Use the New Panel Button only if the control panel communicates directly with the PC and not if it is a slave or sub-master panel.
- Picture Name: Indicates the name of the current picture.
- **Picture Level:** Indicates the depth or level of the current picture. Starting from the site plan (Level 1), each Zoom Down increments the picture level.

# 3.4 Projects

Each graphics application is treated as a project and is given a project name. A project is made up of many related files. The name of every file associated with a given project is prefixed with the project name.

Because many files are created in a project, it is recommended that each project reside in its own directory. Use Windows Explorer to create a new project directory.

Before starting a new project, decide where to keep the project directory located. Choose project names and directories that are meaningful and will help keep track of the work done.

When running the Design program, the following projected related items appear under the file menu item:

- File : New Project: Begins a new project.
- File : Open Project: Opens an existing project.
- File : Save: Saves the current project.
- File ç Save As: Saves the current project under a new name (and in a new directory, if desired).

The project file associated with each project has the file extension '.GPR' indicating it as a graphics project file.

To start a new project, simply select **File ç New**, and begin drawing. Save the project when finished by selecting **File ç Save**.

#### 3.5 Drawing Shapes

Although imported CAD files will most likely be used to provide the majority of the picture detail, there will be times when additional detail will need to be drawn, text will need to be added, or the outline of sub-screen images will need to be defined. The drawing tools are available to allow such tasks to be completed. CAD drawings may not exist for some sites, so the drawing tools may be used quite extensively.

To create an image, click on the tool representing the type of image needed using the left mouse button, and move the mouse to the drawing area to begin drawing.

All new images are created in the default colors and styles.

#### 3.5.1 Regular Shapes

For rectangles, rounded rectangles and ellipses, the drawing process is the same. Once the tool has been selected and the mouse has been moved to the drawing area, press the left mouse button and drag the outline of the image to the required size. The new image will appear in a selected state with re-size handles once the mouse button is released. Drag the handles to resize and drag inside the image to move it. When the size and position are as you want them, click in a blank screen area to de-select the image.

An image can be resized or moved at any time or order as detailed above by clicking on it.

#### 3.5.2 Free Line

This type of line is just the same as if drawing with a pencil. Once the Free Line tool has been selected and the mouse has been moved to the drawing area, hold the left mouse button down and drag it over the screen to draw the line. When the left mouse button is released, the line appears in a selected state with re-sizing handles. The line can also be moved as desired.

#### 3.5.3 Multi-Line Image

This image is a poly-line image that can be either open (multi-segment line) or closed (polygon). Select the multi-part tool and move the mouse to the drawing area. Each time the left mouse button is clicked in the drawing area, a new segment to the image is created.

To create a polygon, close the polygon by clicking on the first point created. To create a multi-line segment, click on the pointer tool on the tool bar when the last line segment has been completed. Then click the mouse again on an empty area of the drawing surface.

#### 3.5.4 Curves

Multi-line images can also have curved segments. To create a curved segment, click the multi-part image, then click a segment node with the right mouse button. A dialog box will then ask which of the two line segments connected to the node is to be curved (for example, the segment before/after the node, or both). The selected image will then appear with additional selection handle(s). Move the handle to change the shape of the curve.

#### 3.5.5 Text

To create text, click on the text tool, and a dialog box will appear requesting text to be entered. Click in the drawing area and the text will then appear in the current font.

To change the text or font setting of a text image, select it by clicking with the left mouse button. Then click the right mouse button and select "Change Text" or "Change Font" from the pop-up. A dialog box will appear which will allow the changes to be made.

#### 3.6 Importing Files

Many CAD systems now export drawing files directly in Windows 3.x '. WMF' file format, or in Windows 95 '. EMF' file format. In general, these files from CAD systems will be used as a backdrop to provide the bulk of picture detail.

# If CAD files cannot be exported in one of the meta-file formats but can only be exported in '. DXF' format, then use any one of the third party software packages available to convert from '. DXF' to '. WMF' or '. EMF' meta-file format.

When using the CAD system to export files in one of the above file formats, it is important that any unwanted detail, such as dimension layers, should be switched off. Also, any small text on a large virtual CAD sheet may not remain clear when fitted to a single screen representation on the PC. A bit of trial and error will provide the experience necessary to decide what to switch off or delete prior to exporting from the CAD system.

If there is any undesirable text after fitting the CAD drawing (or the area of interest) to the full screen width, delete it. If bitmap files are to be used, check that the image area of interest is cropped to eliminate any large blank areas containing no information. This will cut down on the file size and allow the image to be easily resized in the design screen.

To import a file, select **File c Import** and choose the desired file. The cursor will change to indicate that an imported file is being placed. Move the cursor to the desired location for the imported image, and click the left mouse button.

#### 3.6.1 Fit/Stretch Imported Images

These two options allow the selected meta-file or bitmap to be resized by either retaining its proportion, or by losing its proportion.

- Fit to Screen: Re-size the image to the largest size possible while retaining proportion.
- Stretch to Screen: Re-size the image to fill the screen while not retaining proportion.
- To select either command, choose Edit ç Fit to Screen (F1) or Edit | Stretch to Screen (F2).

#### 3.6.2 Locking to Background

Since many imported images will form a picture's background, an image can be locked to the background. When an image is locked to the background, it remains in that position as a backdrop without interfering with other drawing operations to take place in the foreground. It cannot be accidentally selected, moved or resized.

To lock an image to the background, select it with the left mouse button, then click the right mouse button in the drawing area and select Lock Images from the pop-up menu. To unlock all images, click the right mouse button while the mouse is in the picture area, and select Unlock Images from the pop-up menu.

#### 3.7 Image Attributes

All newly created shapes are drawn using the current attribute settings of color, style or font. To change the current default settings, click **Options c Default Image Style**.

To change an existing image's attributes, select the image and do one of the following:

- A. Click the right mouse button and select Image Style from the pop-up menu, or
- B. Click on the Change Style icon on the tool bar.

# 3.8 Symbols Library

The D9061 Fire Graphics Display Software is supplied with a set of default symbols representing call points, heat detectors, control panels, etc. All symbols are stored in Windows 95 '.EMF' file format. Each symbol has a unique file name, for example, MCP,EMF, HEAT.EMF, SMOKE.EMF, etc.

New symbols may be created using the drawing tools provided or by using other drawing programs. To create and use a symbol library using the drawing tools, first create a new directory and then create one of every symbol in the library by doing the following:

- 1) Start a new project, or empty the current drawing screen of all images.
- 2) Draw a new symbol by using one or more of the shapes in the drawing library (it is better to draw the new symbol larger than the final size required).
- 3) Export the drawing in '.EMF' format into the new symbol library.
- 4) Remove all images from the screen, and then import the new symbol. The new symbol can now be resized to the desired appearance.
- 5) Export the re-sized image again to the new symbol library.

When all symbols have been created, run the SETUP.EXE program to select the new library.

#### 3.9 Allocating Devices

Call points, heat and smoke detectors etc. may be added to the drawing by selecting the device button, entering the device details and clicking in the main drawing area.

To edit an existing device, select the device and then click the right mouse button and make the desired selection from the pop-up menu to change the device details.

#### 3.10 Allocating Panels



Control panels should only be allocated if they represent panels that are connected directly to the PC.

Click the control panel button on the tool bar and enter the requested information. To edit an existing panel, select the panel and click the right mouse button. Make the desired selection from the pop-up menu to change the panel details.

## 3.11 Screen Attributes

The screen name, color and auto-hold time can be changed by selecting **Options ç Screen** from the menu.

#### 3.12 Selecting Multiple Images

To select multiple images, do one of the following:

- 1) Select the first image and then hold down the shift key while selecting additional images, or
- 2) With the left mouse button pressed, drag a rectangular area enclosing the desired images and then release the mouse button.

To de-select an image from a group, simply hold down the shift key and click on it.

Multiple images can be cut, copied, pasted, deleted, moved, etc.

## 3.13 Bring to Front / Send to Back

Images are seen in the order in which they are drawn. By selecting image(s) and then clicking on the Bring to Front or Send to Back buttons, the order of the selected images can be changed back and forth from top to bottom.

## 3.14 Cut-Copy-Paste

Selected images are cut to the clipboard by pressing Ctrl-X, or by selecting **Edit ç Cut**. Selected images are copied to the clipboard by pressing Ctrl-C, or by selecting **Edit ç Copy**. To paste an image, press Ctrl-V, or select **Edit ç Paste**.

#### 3.15 Deleting Images

To delete an image, select it with the mouse and then enter CTRL DEL on the keyboard. Clicking the Undo button on the tool bar can restore deleted or moved images. Clicking the Redo button will repeat the previous command.

## 3.16 Find Device

To find the location of a device (for example, the screen where it was drawn), select **Search ç Device** from the menu and fill in the device's details. When the device is found, the relevant screen will be loaded and the device highlighted.

# 3.17 New Sub-Screen

Any solid image on the drawing screen may be selected to hold a sub-screen containing the next level of detail. To associate with, and create a new sub-screen, select the image and then press the Allocate Sub-Screen button on the tool bar. Then fill in the details requested by the dialog box. A new empty drawing screen will appear.

# 3.18 Zoom In

To zoom into a previously defined sub-screen, select the image and then press the Allocate Sub-Screen button on the tool bar. The screen will then be updated to display the parent screen.

#### 3.19 Delete Sub-Screen(s)

To delete a sub-screen and all of its descendant sub-screens, first select the image, then select **Edit ç Delete Sub**screens from the menu bar. All sub-screens, devices and panels associated with the selected image will then be deleted.

#### 3.20 Printing

A copy of the currently visible graphics screen can be printed out. To do this, select **File ç Print**. Access is also available to the Windows printer setup by choosing **File ç Printer Setup**.

#### 3.21 System Events

The fire alarm control panels (FACP) can be programmed to generate event numbers (or system event) for each of its inputs when activated. A FACP's outputs (relays and sounders) may in turn be programmed to be activated by a system event.

System events are transmitted over the control panel communications network and are acted upon by all panels that have their 'System Events' option set to remote.

The user can define system events to be generated on demand by the user at 'runtime' by selecting **Assignments ç System Events** from the menu. Create new system events, or edit older ones by defining the event number and its associated description.

Project - test1 File Edit Search View Assignments Option	ns Help	
		<b>↓ ↑</b>
	System Events  Description  Description  Disable Lifts 50  Event no 3  Main Sounder ALERT 4  Main Sounder ON 2  Open Ventilation Duct 1 120 Open Ventilation Duct 2 5 Unlock Side Exit Doors. 1  Add Remove Edit  Close	
Nothing Selected	Picture : Site Plan	Level: 1
😭 Start 🔛 Design		En 🗐 🥚 12:46

Figure 5: System Events Screen

# 3.22 Zone Descriptions

Each zone may be allocated a description. At run-time, this allows for zones to be enabled and disabled on a text description basis rather than the user having to enter panel and zone numbers.

As new device images are created, a list of zones that have been allocated is automatically updated. New zones automatically added to the list are given a default description, for example 'Panel 1, Zone 3'.

To modify the zone descriptions list, select **Assignments çZone Descriptions** from the menu, then add, remove or edit the zone descriptions as required.

Froject - test1 File Edit Search View Assignments Optio	ns Help	
		<b>↓ ↓</b>
	Description       Panel       Zone         Main Entrance Reception       1         Fabrication - Paint Area       1         Machine Shop       1         Sales Office       1         Admin. Block 3rd Floor       1         Admin. Block 1st Floor       1         Add       Remove       Edit         Close       -	
Nothing Selected	Picture : Site Plan	Level: 1
Start Design		En 🗐 🥚 12:17

Figure 6: Zone Descriptions Screen

# 3.23 Backing up a Project



# Be sure to save any work at regular intervals as the work progresses and when finally completed.

A design containing bitmaps or meta-files can easily take up several megabytes of disk space and simply saving the contents of the project on multiple floppy disks can become cumbersome. A backup utility, such as MS Backup (supplied with the Windows 95 CD), can be used to save and restore any project directory in a compressed form using only a few floppy disks. Many other backup products are available on the market, which have a high degree of integrity. However, be sure that the utility chosen will handle the long file names used by 32 bit systems.

A good practice is to give the project directory a name which is meaningful and reflects the version state of the project (for example, "Site Name Version 1"). If at some point in the future some details of the project need to be changed or added, make a new project directory ("Site Version 2") and copy all the contents of "Site Name Version 1" to it. Backups of each version of the project can be maintained and the most current version can be easily identified.

# 4.0 Setup

Running the set-up program allows the designer to configure the site PC to run the graphics application. The appearance of the SETUP window is shown below.

Type       Name       Master PC            • Master       Main Serial Port          • J             • Slave       More Details           • Log DB             • Colors           • Browse           • Colors             • bol Directory           • Colors           • Sounds	-			
Main Serial Port     Main Serial Port     More Details      More Details      Event Log DB     Clear     Browse      bol Directory     \active\wingraph\symbol     Sounds	Туре	Name	Master PC	
Slave     More Details  ect File KACTIVE\WinGraph\Sample\Sample.GPR Clear Browse bol Directory \active\wingraph\symbol Sounds	Master	Main Serial Port	2	
ect File VACTIVE\WinGraph\Sample\Sample.GPR Clear Browse bol Directory \active\wingraph\symbol Sounds	C Slave		More Details	
VACTIVE\WinGraph\Sample\Sample.GPR  Clear  Browse  Colors  Colors  Sounds	2			
bol Directory Vactive\wingraph\symbol Sounds	iect File			Event Log DB
Browse Colors Active\wingraph\symbol Sounds	oject File			Event Log DB
Active\wingraph\symbol Sounds	iject File :VACTIVE\WinGrap	oh\Sample\Sample.GPR		Event Log DB Clear
\active\wingraph\symbol Sounds	iect File VACTIVE WinGrap	oh\Sample\Sample.GPR Browse		Event Log DB
\active\wingraph\symbol Sounds	ect File VACTIVE WinGrap	oh\Sample\Sample.GPR Browse		Event Log DB
Sounds	oject File :\ACTIVE \WinGrap 	bh\Sample\Sample.GPR Browse		Clear
	oject File :\ACTIVE\WinGrap mbol Directory :\active\wingraph\	bh\Sample\Sample.GPR Browse symbol		Clear
	ect File VACTIVE\WinGrap bol Directory \active\wingraph\	bh\Sample\Sample.GPR Browse		Clear Colors

Figure 7: Setup Screen

## 4.1 PC Details

This area of the SETUP window configures the way in which the PC communicates with the FACPs and also with other PCs.

## 4.2 Master/Slave PC Setup

To select the PC as a master, click the Master button (see Figure 7). As a master PC, the "Main Serial Port" refers to the serial port used for communication with the fire panel network. Select the "Main Serial Port" number and give a name to the PC.

Clicking "More Details" causes another window that defines the slave PC options to be displayed (see Figure 8). If additional slave PCs are needed or desired to monitor the fire system, select the quantity of slave PCs and select the serial port number to be used for their communication.

No. Slave PCs	1
Slave Serial Port	3

Figure 8: Slave PC Details Screen

For a master PC, one free serial port is required for connection to the fire panel network. If slave PCs are needed, then one additional free serial port will be needed to connect these slave PCs to the fire panel network.

Take care when specifying the number of serial ports required for PCs. If an integral mouse is not available, then a serial port will be needed to accommodate a serial mouse. A touch screen would also need a serial port. In the worst case, four serial ports may be required for a master PC.

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To configure the PC as a slave, click the "Slave" button (see Figure 7). As a slave PC, the "Main Serial Port" refers to the serial port used for communication with the master PC. Select the "Main Serial Port" number and give a name to the PC.

## 4.3 Selecting the Project File

To run the D9061 Fire Graphics Display program, the RUN program requires that a project file be selected. This file has a '. GPR' file extension and resides in the project directory along with all the other files making up the project.

To select the project file, click the Browse button and navigate to the directory where the project files are located. The project's '. GPR' file will then become visible in the file display area. Click on the project file and then click the Open button.

Open				?	х
Look jn:	Sample	•			
Sample.Gl	PR				
I					
File <u>n</u> ame:	Sample			<u>O</u> pen	
Files of type:	Project files (*.gpr)		•	Cancel	1
	Dpen as read-only				

Figure 9: Selecting the Project File, Open Screen

## 4.4 Clearing the Event Log

The Run program writes all alarms and operator actions to the event log. To clear all the records from the event log, click the Clear button in the Event Log DB area of the main setup window (see Figure 7).

#### 4.5 Setting Alarm Colors

The Run program indicates alarm conditions by displaying colored graphics images and indicator panels. Each type of alarm can be represented with its own color. To set the alarm colors, click the Colors button on the main setup window (see Figure 7). To change a color, click the mouse on the required alarm and select the new color.

Herent Colors	_ 🗆 ×
	Fire
	Security
	Fault
	Warning
	Disabled
	se

Figure 10: Event Colors Screen

# 4.6 Setting Alarm Sounds

By generating a sound sequence using the PC's internal speaker, the Run program can announce new alarm conditions. Each type of alarm can be represented with its own sound. Each alarm sound consists of four distinctive timer periods, each with its own tone and duration.

To set up the sounds, click the Sounds button on the main setup screen (see Figure 7) to bring up the sound window (Figure 10). To change a particular sound period, click on the relevant cell on the display then click the Up/Down controls to set the tone and duration.

Fire	2KHz-1s	2KHz-1s	OKHz-1s	OKHz-1s
Security	2KHz-1s	 2KHz-1s	OKHz-1s	OKHz-1s
Fault	2KHz-1s	2KHz-1s	1KHz-1s	OKHz-1s
Warning	2KHz-1s	2KHz-1s	OKHz-1s	OKHz-1s
Disable	2KHz-1s	2KHz-1s	OKHz-1s	0KHz-1s

Figure 11: Sound Setup Screen

# 5.0 Runtime Issues

This section deals with the general considerations of running the application project on the site PC. The D9061 Fire Graphics Display program should be installed as described in section 2.0 D9061 Software Installation (page 3). The project files should be copied into a project directory on the site PC's hard disk.

The project directory **should not** be located in the same directory area used for installation, otherwise un-installing the graphics software will also remove the project.

Choose a top-level directory, such as "C: \Project Name Version 1". The Setup program can then be used as described in section 4.0 Setup (page 14) to configure the serial port, project file etc.

#### 5.1 Screen Savers

Any active screen saver installed on the system will be automatically disabled whenever a new event is detected by the system. When all the current events have been accepted, and provided there are no fire or security events present, then the screen saver will be re-enabled and allowed to operate as normal.

## 5.2 Automatic Start-Up

The procedure for making a program start up automatically is detailed in the Windows help system and is repeated here:

To start a program each time Windows starts:

- 1. Click the Start button, and then point to Settings.
- 2. Click Task Bar, and then click the Start Menu Programs tab.
- 3. Click Add, and then click Browse.
- 4. Locate the desired program (for example, RUN.EXE) and then double-click it.
- 5. Click Next, and then double-click the start-up folder.
- 6. Type the desired name to appear on the start-up menu, and then click Finish. If Windows prompts you to choose an icon, click one and then click Finish.

## 5.3 Master/Slave PC Systems

The main PC that connects to the master FACP (or multiple stand-alone FACP's) is known as the **Master PC**. A slave PC can be added to the system to provide a secondary means of monitoring and controlling the fire system. Figure 11 shows the method of connecting a master/slave PC system. Notice that the master PC will require two serial ports for communications. If the master PC has a serial mouse, then a total of three serial ports will be needed.

Install the D9061 Fire Graphics Display software on both PCs along with a copy of the project files. Run SETUP on both PCs to configure the serial ports and define each PC as being a master or slave.



Figure 12: Master - Slave PC System Interconnections

# 5.4 Year 2000 Compatibility

Each new event (fire, fault, etc.) is time/date stamped and written to the runtime event log data base using full four digit "yyyy" year format. The display of the event log's contents (and any user-selected filter) is correct across the year 2000 boundary.

# 5.5 User Log-In Codes

After installing the software on the site PC, add users with different access levels and their passcodes to the user list. Use passcode "SYS1" in uppercase to gain Level 3 access. Level 3 access allows the user to add, change and edit user details.

# Appendix

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