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# SCREEN MANAGER SITE LICENSE AGREEMENT

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ABB Screen Master Recorders

## **Grant of License**

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## 1.0 Introduction

Screen Manager is a Windows-based PC package which accompanies the ScreenMaster recorders as a data acquisition and configuration tool. The mouse and keyboard operations are Windows-orientated and this manual is written under the assumption that the user is familiar with Windows.

«softname» is designed and written for Windows 95 and Windows NT version 3.51 or later. «softname» will run with Windows 3.1 but requires the Win32s (version 1.3 or later) 32-bit API extensions.

Any technical terms peculiar to the ScreenMaster-recorders should be referred to in the ScreenMaster User Manual

## 2.0 System Requirements

**Screen Manager requires the following minimum specification:-**

- 80486 or Pentium processor
- 3.5" floppy disk drive
- Windows 95, Windows NT v3.51, Windows 3.1/3.11 with Win32s (v1.3 or later)
- 4 Mb of RAM (8 Mb recommended)
- 4 Mb free hard disk space
- a Mouse

**The following minimum specification applies to SM-device-bus /Data Server Systems**

- 166MHz Pentium processor
- 2Gb Hard-drive
- Running Windows 95 or NT
- 32Mb RAM
- Optional 8-way RS485 card (Windows NT 4,0 only)

### **MOST IMPORTANT INFORMATION**

When using SM-device-bus communications, the recorder date/time is synchronized to the PC clock which bases all its calculations on the Time Zone currently in use.

To avoid problems, the user **MUST ENSURE THAT AUTOMATIC DAYLIGHT ADJUSTMENT IS TURNED OFF**. This will mean that manual time adjustment forwards or backwards an hour will be necessary in order that the time of the recorders be the same as the local time. Some users may not want to allow for daylight saving, and log all data to GMT or their local standard time at a fixed offset from GMT. There are no difficulties associated with this mode of operation.

Any recorders which are not connected to SM-device-bus will have to be adjusted manually for daylight saving. The data imported into **Screen Manager** will always be graphed at the time of the data, with no allowances for daylight saving being made, e.g. data recorded at 10 a.m. will be graphed on **Screen Manager** at 10 a.m. whether or not the PC is an hour ahead. If users wish to combine their data from different processes on one graph, they must ensure that all recorders are synchronized.

## 3.0 Installation

**Windows 3.1 Screen Manager** will only run under Windows 3.1 if Win 32s (version 1.3 or later) is installed. If you do not have a suitable version of Win 32s on your system, installation disks for Win 32s are supplied with Screen Manager.

To **install Win 32s** on your system:-

1. Place disk 1 in the 'A' drive of your PC
2. Select **Run** from the **File** options in **Program Manager**
3. Type a:\setup then **<Return>**
4. Follow the installation instructions on your screen

When installation is complete you will be asked to restart your PC. Screen Manager can now be installed.

To **install Screen Manager**:-

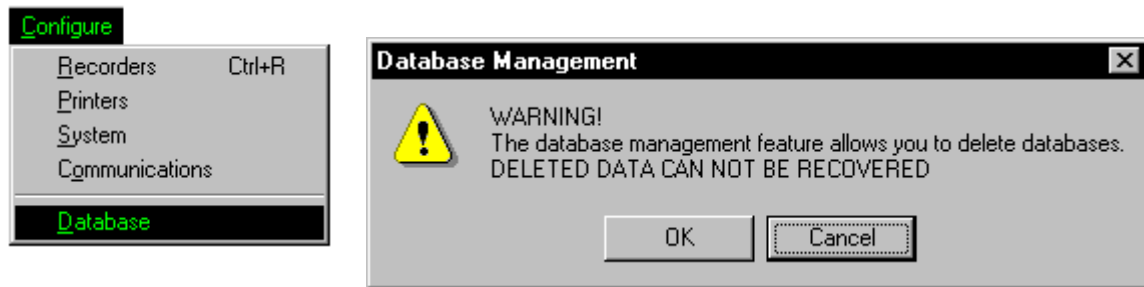
1. **From Windows 3.1** select **Run** from the **File** options in **Program Manager**. Type **a:\setup** and press **<Return>** to begin installation- follow the instructions displayed on your screen.
2. **From Windows 95** click on the **Start** button and select **Run**. Type **a:\setup** then click on **OK**.

During installation you will be asked to confirm the drive and directory into which you would like Screen Manager installed. The default drive is **C:\** and the directory is «directory» - you can type in an alternative drive and/or directory of your choice. Click on **OK** to complete the installation.

## 4.0 Upgrading

If you are upgrading from version 3.3 or version 4.0 to this latest version you will need to do the following:

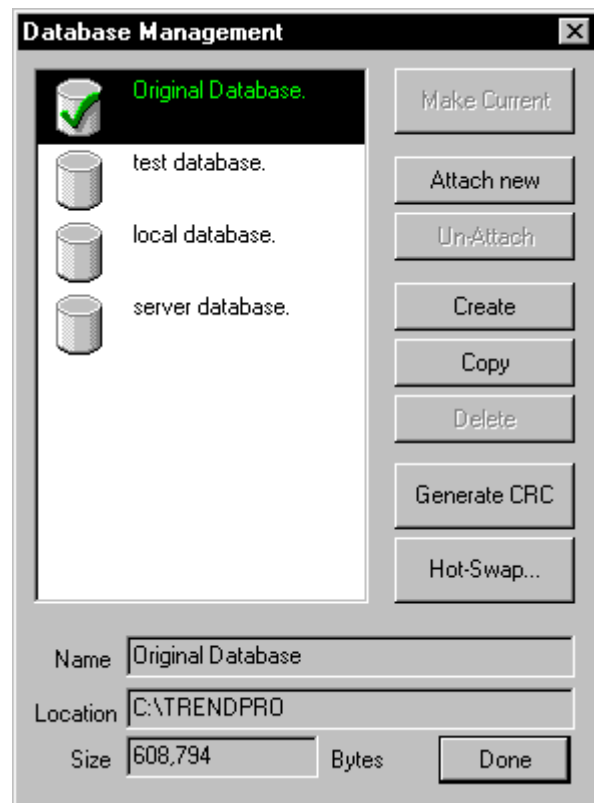
1. Select **Configure-Database** from the main menu – the warning message shown below will appear



2. Click **OK** to enter the Database Management dialog box
3. Note the name of the active database (the one with the green tick) – in this case 'Original Database'
4. Select a non-active database (e.g. 'test database') and click on **Make Current** (if you only have a single database in the list, create a new empty database by clicking on **Create**, then select it)
5. Select the previously active database ('Original Database') and click **Make Current**
6. Click **Done**.

This operation is required because in Screen Manager version 4.8x graphs are stored locally on the PC on which they were created – this enables multiple users to create graphs from the same data, for instance when the database is held on a network server.

On selecting a database and making it Current, any existing graphs are copied from the database to the new local graph store.



## 5.0 Operation

To start **Screen Manager** :-

**From Windows 3.1** open the **Screen Manager Program Group** in Program Manager, then double-click on the **Screen Manager icon**.

1. **From Windows 95** click on the **Start** button, open the **Programs** list then select **Screen Manager**.

The **Screen Manager** has a comprehensive on-line Help facility which includes detailed instructions on how to use, as well as information on ScreenMaster recorders. A section on using Help in **Screen Manager** is also included and this is repeated in Section 6 of this manual for ease of reference.

When you run you will see a Menu bar and a Toolbar at the top of the display. A brief description of each of these facilities is given below.

### **Menu bar**

The Menu bar works in the same way as any standard Windows menu bar. The **Screen Manager** Menu bar contains the following options:-

- Configure** - primarily for setting up a ScreenMaster recorder, but also allows certain configuration and Printer setups.
- Graph** - from this menu you can open a graph. Once a graph is open, this menu also allows you to set up and print a graph.
- Data** - from this menu you can either import data from a recorder or export data to other PC applications.
- View** - from this menu you can enable or disable certain features such as the Toolbar or Status bar.
- Help**- this menu offers all the Help-related functions

One other item, **Window**, is added to the Menu bar when a Graph Window is open. This is a standard Windows application item.

### **Toolbar**

The Toolbar allows quick operation of certain functions found in the Menu bar. Tool Tips are given for each icon in the Toolbar - simply point to an icon with your mouse pointer and a brief description of that icon will appear.

To operate a Toolbar function simply click on the corresponding icon.

## 6.0 Help in Screen Manager

Help in Screen Manager can be used in various ways.

1. You can select **Index** from the **Help** drop-down menu and choose the topic on which you need help
2. You can click on the Help Icon, then point-and-click on the topic on which you need help
3. You can press F1 to call up information on the contents of the window that is currently active.

There are two types of Help topic:-

- A jump topic is in green text with a single underline - when you click on this piece of text you will be taken to a new topic.
- A pop-up topic is in green text with a dashed underline - when you click on this piece of text, additional information will appear, then disappear when you click a second time.

### **Closing Help**

Close the Help Window as you would for any Window within the Microsoft Windows system.

### **Help Maze**

The Help Maze provides an overview of the entire **Screen Manager** Help system - you can click on a signpost in the Help maze to jump to a topic. The Help Maze will close down behind you.



Click on this button to enter the Help Maze



Click on this button to leave the Help Maze.

Remember you can press F1 at any time when Screen Manager Help is running for general instructions on using a Windows-based Help system.



## 7.0 Getting the most out of Screen Manager

**Screen Manager** includes a whole range of features designed to make life easier but which are not always obvious to the first-time user. This document is intended to help you get straight to those features that greatly enhance the functionality of **Screen Manager**.

### 7.1. Recorder Configuration

**ScreenManager** allows you to set up a ScreenMaster-recorder from the comfort of your PC. The heart of this facility is the **Recorder Configuration Page**. From here you have access to all the set-up facilities available on a ScreenMaster-recorder, with the advantage of keyboard and mouse operations that make the whole process much faster. Once you have selected your set-ups you simply load them onto floppy disk so that you can transfer the set-ups to a ScreenMaster-recorder.

Some of the main features of the Recorder Configuration Page are described below.

- You can copy Pen set-ups to other pens using the right mouse button - simply click-and-drag a Pen button over to any other pen that you want set-up in the same way. This copies ALL pen set-ups, including Maths Expressions, which means that the copied pens will display the same data as the original.
- The amount of recording time with your chosen set-ups is calculated for you by the Disk Usage Calculator - click on the Disk Use button with the left mouse button to operate this feature
- The simulated display provides you with an instant means of assessing how your current set-ups will look on a ScreenMaster display
- To load set-ups to disk simply place the disk in the drive of your PC and click on the Export button

*See Recorder Configuration Page in the Help facilities*

### 7.2. Importing Data

Having used **Screen Manager** to set-up a ScreenMaster-recorder, the next main function is to store your recorded data. To do this you simply take the disk from your recorder, place it in the drive of your PC and click on the Import icon.

**Note:** If you are ever unsure about what an icon does, just place the mouse pointer over it and a 'tool tip' will appear, giving a brief description of the icon.

Data is stored under individual 'Recorders' on the **Screen Manager** database. It is worth your while looking at the on-line Help for this subject to fully understand the Import process.

The main features of the Import Data facility are:-

- The Import Window which provides you with information on incoming data and shows you the progress of the operation
- Automatic creation of new 'Recorders' on the database where the data can be stored according to the ID number and description of the source recorder
- You can choose whether to include the latest set-ups from the source recorder along with the imported data

*See Importing Data in the Help facilities.*

## 7.3. Graphing

**Screen Manager** allows you to prepare the data imported from ScreenMaster-recorders as a graph. To open a graph you click on the Graph icon **Fehler! Textmarke nicht definiert.** which calls up the Graph Settings Page. From here you can select various data sources for your graph. (Data is imported to each 'Recorder' on the **Screen Manager** database under the Pen on which it was recorded - a data source is therefore a particular Pen from any one of the 'Recorders' on the database.)

### The main features of the Graph Settings Page are:-

- 'Click-and-drag' a data source (or Pen) to a Graph Area using the left mouse button
- Graphs can be split into as many as four graph areas, each of which can contain up to 12 different data sources. A graph area is activated as soon as you 'drag' a data source into it
- Remove a data source from the Graph Settings Page by simply dragging the data source to the Remove Bin
- Select the style in which a data source will be displayed on a graph by double-clicking on the data source in a Graph Area - this calls up the Trace Settings Page
- Further selection of data for a graph is possible through the Data Locator (see below)

The **Data Locator** is a tool for selecting various data sources over a specified time span. Within the Data Locator each data source is represented as a coloured bar which stretches over the time span during which the data was recorded. Where the data was recorded over more than one recording session, the bar will be split into sections representing each session. The Data Locator is used as follows:-

1. Click on the Enable check box to select a data source.
2. Specify the overall time span by 'dragging out' a box to the width you require. Alternatively, use the Zoom buttons to reduce the time span ('In' button), increase the time span ('Out' button) or return to full width ('All' button).
3. Move to a particular point in time by 'dragging' the scroll bar using the left mouse button - the centre time of the Data Locator is shown as you move the scroll bar.
4. Click on a data source with the right mouse button to bring up information on that session such as Start time, Stop time, Logging method used, and Number of readings.

The Data Locator displays the time span and sources of data that will be made available to a graph (or exported to another application - see **Exporting Data** below).

Graphs are opened as Graph Windows, and can be moved, re-sized or minimised in the same way as any standard Windows application. Once you have selected the layout of your graph, it can then be printed or the data shown in the graph can be exported to another application (see **Exporting Data** below).

### The main features of a Graph Window are:-

- 'Click-and-drag' a box around a section of the graph on which you want to zoom in, either on the x-axis, or the y-axis, or both
- Cancel a 'click-and-drag' operation by clicking the right mouse button while the left button is still held down
- Switch between scales for each trace by double-clicking on the scale of a Graph Area
- Double-click on a scale with the right mouse button to return the Graph Area to full y-axis
- Various icons become available in the **Screen Manager** toolbar when a Graph Window is open

*See Graph Windows in the Help facilities*

## 7.4. Exporting Data

Data can be exported from **Screen Manager** in Comma Separated Variable (CSV) format to files which can then be imported to other applications on your PC, such as Microsoft Excel, Lotus 1-2-3, and Quattro Pro.

Data can be exported in two ways:-

1. Click on the Export icon to export data selected in the Data Locator (as described in **Graphing** above)
2. Click on the Export View icon, which exports the data contained in the Graph Window that is active at the time

Both methods call up the Export Window - here you can select whether you want to export the data using the standard or Lotus 1-2-3 time/date format.

## 7.5. Snap Shot Viewer

This facility allows you to look at Screen Dumps that have been taken from a ScreenMaster-recorder. (Screen Dumps are instantaneous images of the recorder display captured on disk when the **Shift** and **-->|** keys are pressed.)

To use the Snap Shot Viewer, place the disk containing the Screen Dumps in the drive of your PC and click on the Snap Shot icon. **Screen Manager** will automatically scan the disk and present any detected Screen Dumps as a list from which you can select the ones you want.

Subject to technical changes.

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