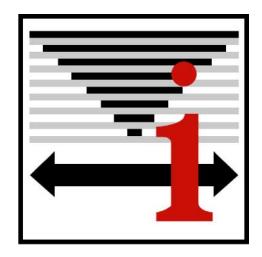
# Econ System User Manual



LOGIC Technologies, Inc.

May 30, 2001

# Table of Contents

CHAPTER 1 - Operational Overview	
InterLOGIC dbc/OS Console Startup	
InterLOGIC Engineering Console	
Login	
Mute	
Signal Server Console View for PC-based control systems only	
Q&A Library	
Editor	
Graphics	
Alarms	5
CHAPTER 2 - Viewing Historical Data	6
Signal Trending Screen	7
Selecting Data for Display	7
Acquire Recent History Data for Display	8
Export Historical Data to Excel	8
Print Historical Data Reports	8
Import Archived Data for Display	9
Saving Displayed Trend Data to Disk	9
Interval Skip	9
Graphical Line Trend Display	10
Graphical Line Trend Display - Data Zoom	10
Graphical Line Trend Display - Detail Menu	11
Graphical Line Trend Display - Mark Data Points	11
Graphical Line Trend Display - View Data Point Value	12
Graphical Line Trend Display - Include Data Labels	13
Graphical Line Trend Display - Printing and Saving	14
CHAPTER 3 - System Configuration	15
Logon for System Configuration	16
Signal Server Console View Configuration and Additions	17
Signal Server Console View Modem Configuration	18
Telephone Number Setup	19
Project Archive	20
Edit Graphic Screen Bitmap	21
Graphic Tools - Creating and Editing Graphic Objects and Text	22
Graphic Tools - General	22
Graphic Tools - Copying Graphics Objects	23
Graphic Tools - Creating New Graphics	23
Graphic Tools - Library Tab	24
Graphic Properties	25

Graphic Properties - Description Tab	25
Graphic Properties - Data Tab	26
Graphic Properties - Engineering Units Tab	27
Graphic Properties - Button Area Tab	28
Graphic Library Editor - Overview of Graphic Animations	29
Graphic Library Editor - New Graphic Items	30
Graphic Library Editor - Movie	30
Graphic Library Editor - Toggle	30
Graphic Library Editor - ON/OFF Operation	31
Graphic Library Editor - MOA Operation	33
Graphic Library Editor - ON/OFF Status Image	33
Graphic Library Editor - Status Image	34

# CHAPTER 1 Operational Overview

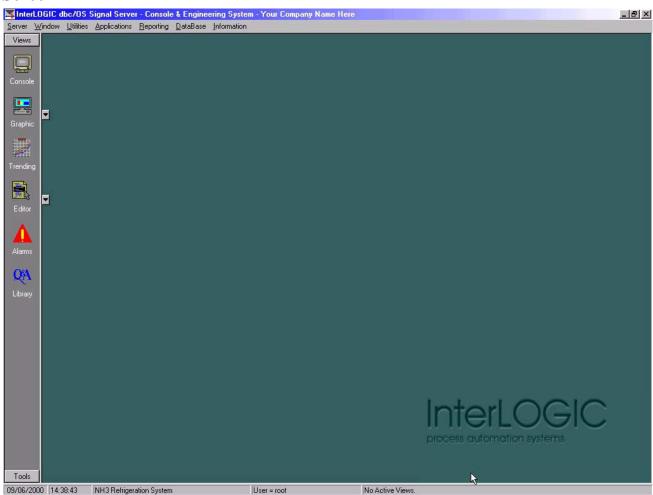
# **InterLOGIC dbc/OS Console Startup**



From the Windows Desktop, double click the dbcOS Engineering Console icon to start the InterLOGIC dbc/OS Engineering Console.

## **InterLOGIC Engineering Console**

**Screen 1** is the main screen that provides access to the graphic windows, system views, system tools and the main pull-down menu bar. If the Toolbar on the left of the screen is not displayed, click *Window* on the main menu and then *Tools*.



## Login

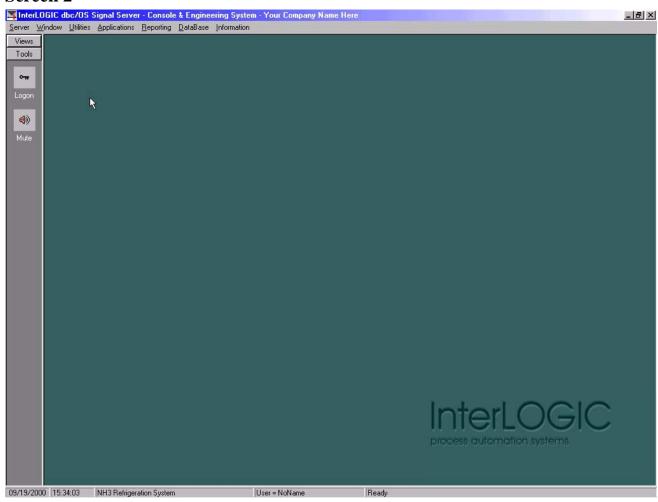


Click on the *Tools* button at the lower left side of **Screen 1** to display the tool bar shown in **Screen 2**. Now click the Logon button to logon to the system. Enter your user number, user ID and password, then click Logon. Graphic screens can be viewed by the operator without logon, but many system configuration operations will not be available.

#### Mute



The *Mute* button will silence the alarm horn output. Muting the alarm does not acknowledge it. Acknowledgment must take place on the alarm screen. See Alarms on page 5.



## Signal Server Console View for PC-based control systems only



Click on the View button on **Screen 2** to display the View menu (**Screen 1**). Click on the Console button to display the Console Select window (**Screen 3**). You can also access the Console Select window from the pull down menu by selecting *Server* > *Console View* > *Open*. To view the details of your Signal Server system, select *Your Installation Name* and click *OK*. This will take you to the main menu which gives access to system setup, control and monitoring features.

#### Screen 3



# **Q&A Library**



The help details for the Signal Server Console View menus can be found by clicking the *Q&A Library* button.

#### **Editor**



Click the *Editor* button to open the Text editor. This gives you a convenient text editor for printing and saving text documents.

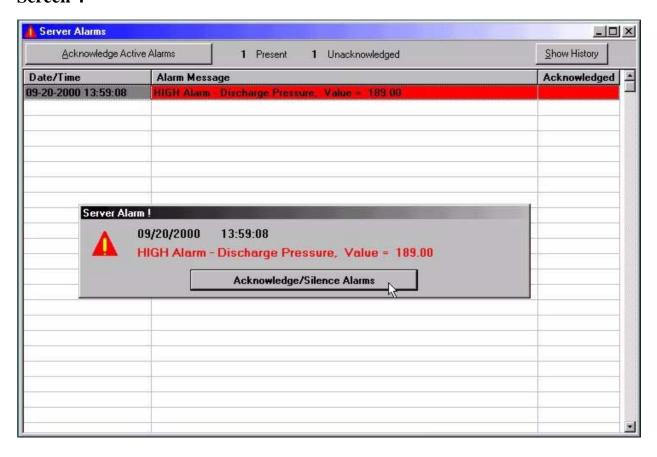
# **Graphics**



Clicking the *Graphic* button will display your system's main graphic start screen. Click the *down arrow* to display a list of all the available graphic screens. Click on the desired screen to go directly to that graphic. Each screen is specific to your control system. Click on various buttons to go to other areas, change setpoints and to turn on/off outputs.

#### **Alarms**

If an alarm occurs in the system, you will be notified with the specific server alarm message (small window on **Screen 4**). Click the *Acknowledge* button to close the message window and display the **Server Alarms** window. Clicking the *Acknowledge Active Alarms* button will silence the alarms and log the current user name in the *Acknowledge* column. A yellow alarm will appear with the *Condition Normal* message after the signal is no longer in alarm. To clear the alarm from the display, right click in the alarm window and select *Purge To History*.



# CHAPTER 2 Viewing Historical Data

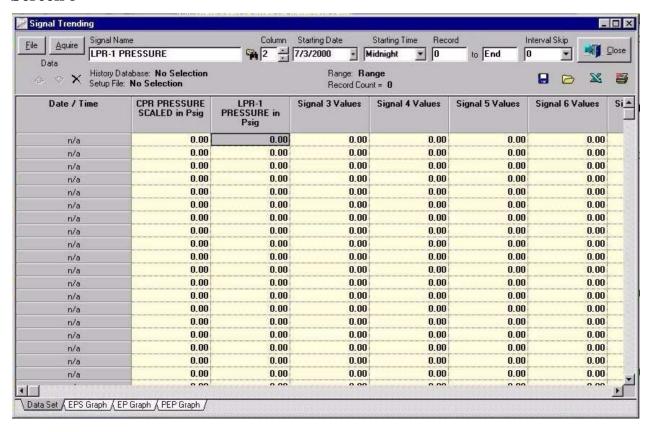
### **Signal Trending Screen**



Clicking the *Trending* button on the Econ toolbar will display the **Signal Trending Screen 5**. The screen gives the operator the ability to view data list and trend graphs. All analog data points for the system are stored to disk and may be viewed.

## **Selecting Data for Display**

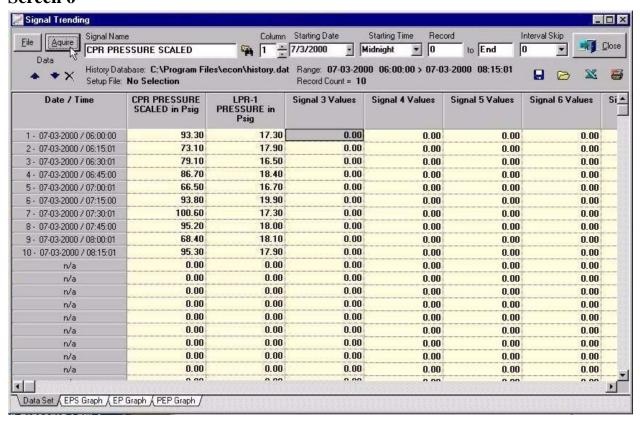
The first step to displaying a data trend is to select the signal data to be displayed. Click on a data column or select a column with the up/down arrow keys next to the column box. Click on the browse button (binoculars) next to the *Signal Name* to display the signal data that is available for trending. Select the signal data point to be trended for the selected column. Repeat the steps for up to ten columns of data. The group of signal data points may be saved to disk and then recalled to display the group of data again in the future. To save the defined data set, click the disk button, enter a name and click *Save*. The data set can be opened in the future by clicking the folder button.



## **Acquire Recent History Data for Display**

After selecting the analog data to be trended, click the Acquire button to display the most recent historical data file (**Screen 6**).

#### Screen 6



# **Export Historical Data to Excel**

If you have MS Excel on your system, you can export the data directly to Excel. Check the *Show Export* box to start Excel after the export. Check the *Email* box to email the exported Excel file.

# **Print Historical Data Reports**

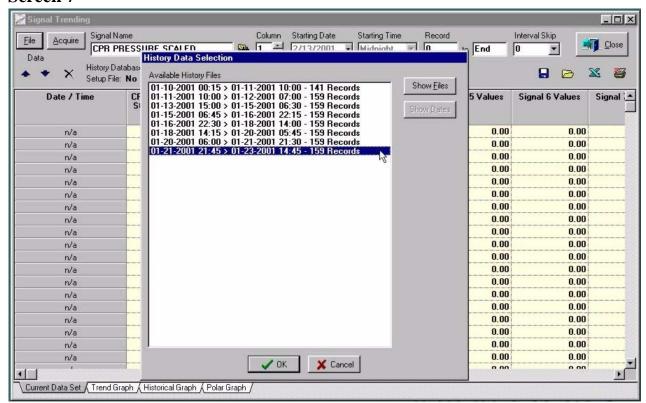


Use the *Print* button to generate a report of the currently displayed data. Once the report is displayed, you can right click on the report to send it to the printer or to save it as a text file.

# **Import Archived Data for Display**

Use the *File* button to import data that was stored prior to the data that was retrieved with the *Acquire* button. This will display the History Data Selection window on **Screen 7** above. Select a file to import the historical data into the trend screen. To select multiple files to be displayed sequentially, click to highlight the first file to be displayed and then Shift - click on the last file to be displayed. Click on the *OK* button to retrieve the selected files.

#### Screen 7



# Saving Displayed Trend Data to Disk

The data set and the associated data shown on the trend screen may be saved as a group using the disk button.

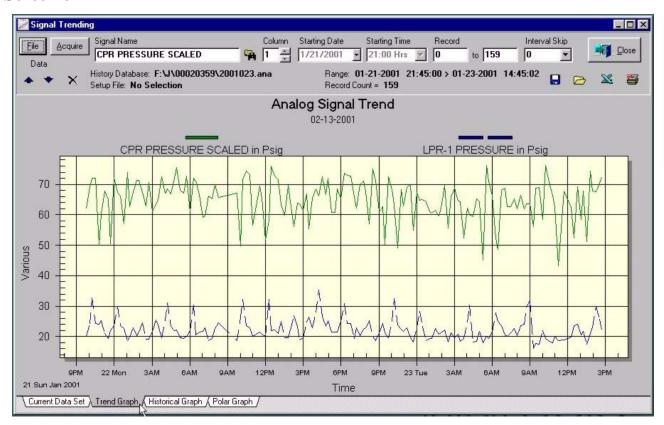
# **Interval Skip**

The *Interval Skip* box allows you to view the data at longer time intervals than it was actually stored. For example, if the data was stored every 15 minutes and you select the *Interval Skip* of 1, then the data sample for every 30 minutes will be displayed.

## **Graphical Line Trend Display**

Click the *Trend Graph* tab on the lower left side of the screen to display the line graph shown in **Screen 8**. Right click on the graph to display detailed graph viewing options. The *Historical Graph* and *Polar Graph* types are also available for display. Click the *Data Set* tab to return to the main screen.

#### Screen 8



# **Graphical Line Trend Display - Data Zoom**

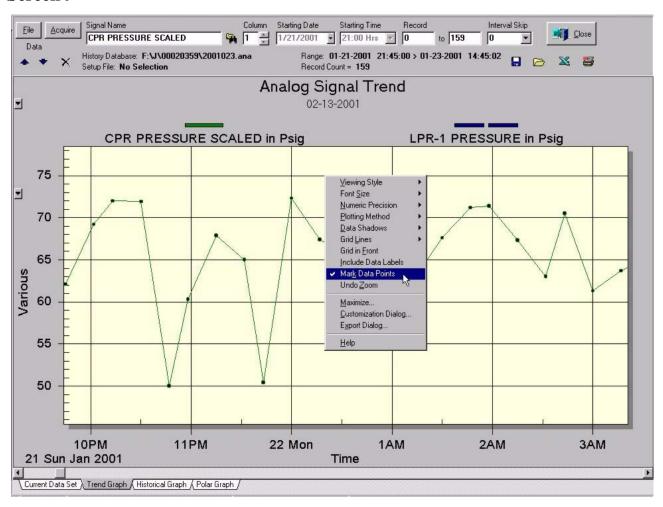
To zoom in on a specific data and time range, left click the mouse at the start point, drag to the stopping point and then release the left mouse button. The graph will now display the selected details. To return to the display of the entire graph, right click on the graph and select *Undo Zoom*.

# **Graphical Line Trend Display - Detail Menu**

Right clicking on the trend graph will display the trend Detail Menu. Several options are available to customize the look of your trend graph. The most useful features are discussed below.

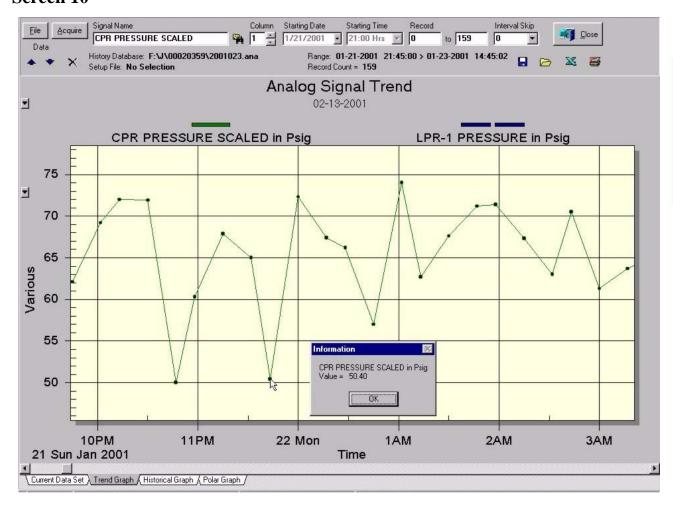
## **Graphical Line Trend Display - Mark Data Points**

Right click anywhere on the white portion of the graph to display the menu shown on **Screen 9**. Selecting the *Mark Data Points* option will display the point on the graph that the data was recorded. Select the *Mark Data Points* option again to remove the marked points on the graph.



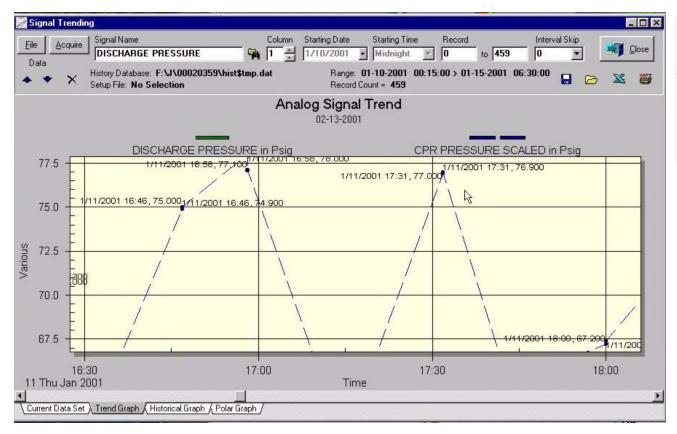
# **Graphical Line Trend Display - View Data Point Value**

While the *Mark Data Points* option is checked, you can use the mouse to click on a specific data point to display the stored value.



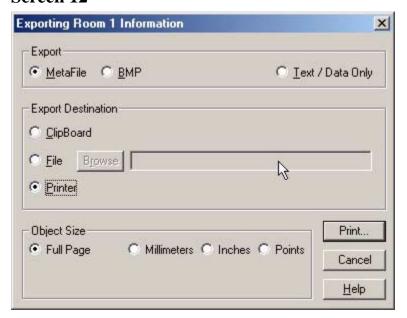
## **Graphical Line Trend Display - Include Data Labels**

To show the line graph with the data point labels displayed (**Screen 11**), right click on the graph to display the pop up menu as on **Screen 9.** Select the *Include Data Labels* option. Select the *Include Data Labels* again to remove the labels.



# **Graphical Line Trend Display - Printing and Saving**

Once you have the desired graph area displayed on the screen, right click anywhere on the white portion of the graph to display the menu shown on **Screen 9**. Selecting the *Export Dialog* will display **Screen 12**. Check the *Printer* as the *Export Destination*. The *Print* button will appear. Click the *Print* button to send the currently displayed trend graph to the printer. The graph can also be sent to the *Clipboard* to be copied to another application or saved to disk as a *Text* file, a *.BMP* graphic or *MetaFile*.



# CHAPTER 3 System Configuration

# **Logon for System Configuration**

Authorized users must logon to the system to access system configuration menu options. If you are not currently logged on, then click Server > Logon from the main menu. Enter your User Number, User ID and password, then click Logon.

## Signal Server Console View Configuration and Additions

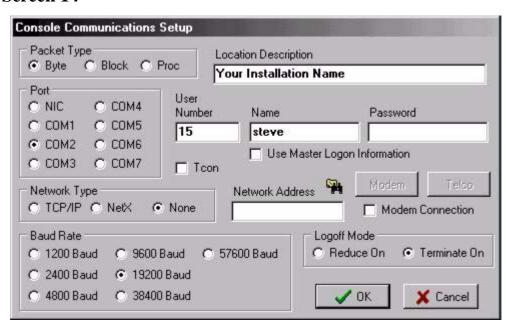


Click on the *Console* button to display the Console Select window (**Screen 13**). You can also access the Console Select window from the pull down menu by selecting *Server* > *Console View* > *Open*.

#### Screen 13

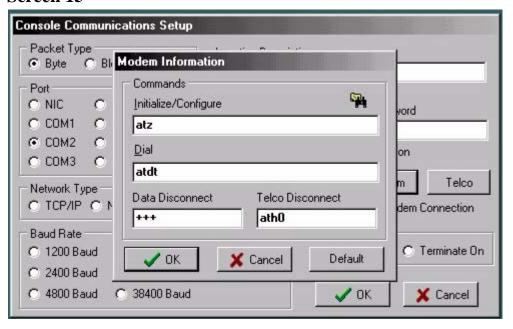


To modify the communication parameters, click on the Edit button on **Screen 13**. Your setup should be similar to the one in **Screen 14**. The *Baud Rate, Port* and *User* information may vary. To setup a new configuration for a different user or a dial up connection, click *Cancel*. From the pull-down menu bar, select *Server* > *Console View* > *New*. **Screen 14** will be displayed without the configuration information. Fill in the data for your new connection.



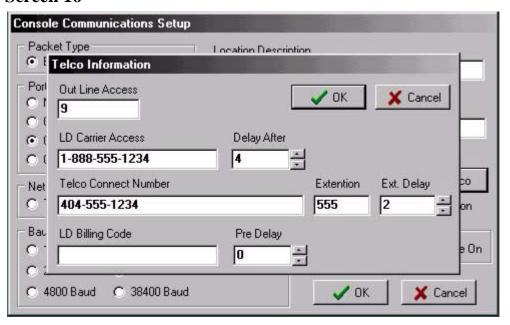
# **Signal Server Console View Modem Configuration**

To setup a modem connection for remote access, check the box next to *Modem Connection* on the Console Communications Setup **Screen 14**. Click the *Modem* button to display the Modem Information window on **Screen 15**. Click the *Default* button to fill in the setup default shown above. Your modem settings may vary from the ones shown above. If you already have a modem connection that is configured, you should use the same settings for each connections. Consult your modem manufacturer's information if the settings do not work correctly. Click *OK* to accept the changes or *Cancel* to leave unchanged.



## **Telephone Number Setup**

After setting up the modem, click the *Telco* button to setup the modem dialing sequence. The *Telco Connect Number* is the number of the system to dial to. The remaining items may be left blank if they are not necessary for your location. Enter any required dial out access numbers in the *Out Line Access* box. To dial a long distance access number, enter it in the *LD Carrier Access* box along with a delay (in seconds) time before dialing the phone number. An extension may be entered with an *Ext. Delay* time between dialing the phone number and dialing the extension number. Any calling card numbers will be *Pre Delay* to pause before the calling card number is dialed.



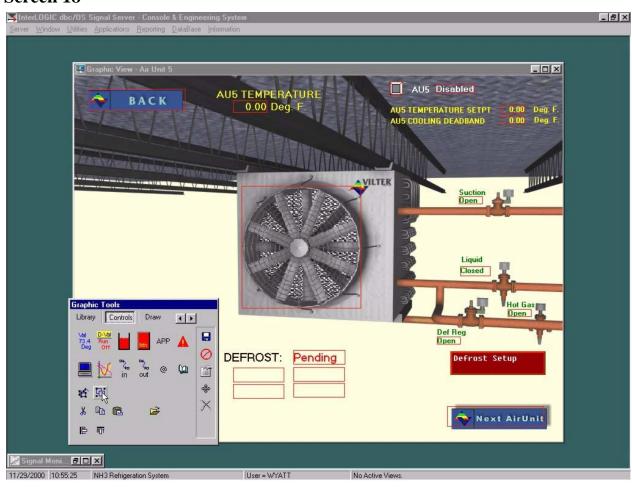
# **Project Archive**

The windows system file my be backed up into compressed file format (.zip). From the pull down menu bar, select *Utilities* > *Project Archive* to display the **Screen 17**. First, you must enter a path. You can type the path in or use the binoculars to browse for the directory used to store the archived files. Group as *Multiple Files*. The Single File button is for future use.



## **Edit Graphic Screen Bitmap**

To edit or add static or background graphics to a screen, display the screen to be edited using the system screen select buttons or click *Server* > *Graphics* > *Edit* from the main menu. You must be logged on to perform screen edits. Once the desired screen is selected, right click on an empty area and select *Edit Bitmap*. This will launch the Paint bitmap editor with the current screen ready for edit. When you have completed the edits, save the screen from the editor or exit without saving to cancel changes.

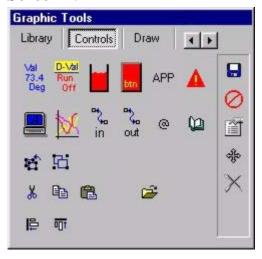


## **Graphic Tools - Creating and Editing Graphic Objects and Text**

To edit and add animated graphics or text to a screen, you must be logged on to the system. Once the desired operator screen is selected, right click on an empty area and select *Edit Screen*. This will display your Graphic Tool window **Screen 19**. When you have completed the edits, save the screen by clicking the disk button. To exit the Graphic Tool window, right click on an empty area of the screen and select *Control Mode*.

To cancel the edits made on the screen, do not click the disk button. Exit the graphic editor and exit the operator screen. You will be prompted to *Save Change*. Click *No* to cancel all graphic edits.

#### Screen 19



## **Graphic Tools - General**

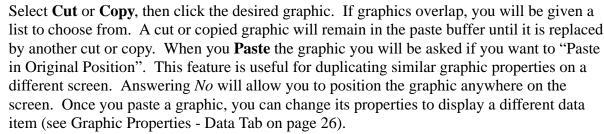
- The **Save Graphic Edits** button saves your edits before you exit the Edit Mode.
- Use the **Cancel Current Operation** button to cancel the graphic insert mode.
- Click the **Delete Item** button and then click a graphic item to delete the item.
- Click the **Move Item** button to move a graphic or real time text value and then click once on the item to be moved. The item begins to drag with the cursor. Position the item in its new location and click again to drop it. Moving analog and signal data text will require three clicks. The first click is for the data, the second is for the description and the third is for the engineering units.
- Use the **Show/Hide Hot Areas** button to toggle the hot area locations from invisible to visible. The hot area of a graphic is the area on the screen that will respond to mouse operations or display data while the screen is in the control mode.
- Click the **Delete Item** button and then click a graphic item to delete the item.

## **Graphic Tools - Copying Graphics Objects**

The easiest way to create a new object is to copy an existing object from the current screen or even from another screen. This will copy all of the current graphic properties such as font size, and color for the descriptions, values and engineering units. After copying a graphic or creating a new graphic with the graphic tool, you may edit its graphic properties (see page 26). For example, you may want the same look for a different analog value.







## **Graphic Tools - Creating New Graphics**

From the Graphic Tools (**Screen 19**) window, click the desired button to add a new graphic object. After the object has been placed on the screen, you may click on the object to edit its graphic properties. The details for editing the graphic properties are found in Graphic Properties on page 25.



Use the **Analog Value** button to place a new analog data value on the screen. Click the button and the Analog Database will be displayed. Click on the desired data item and then click the select button. The description will begin to float on the screen. Drag it to the desired location and click once to drop it on the screen. Repeat the process for the data value and engineering units. To change the properties, click the data item to display the Graphic Properties Editor.



The **Digital Value** button will place a digital signal data point status indicator on the screen. The status will be a text message indicating on or off. Click the button and the Signal Database will be displayed. Click on the desired data item and then click the select button. The description will begin to float on the screen. Drag it to the desired location and click once to drop it on the screen. Repeat the process for the data value.



The **Level Fill** button allows you to add a dynamic bar graph that will correspond to an analog data value. It displays the graph for a data range from 0 to 100. Clicking on the button will display the Analog Database Selection window. Click the desired data point and then click the select button. Position the cursor at the location of the top left corner of the bar graph. Click, hold and drag the box to the low right corner of the bar graph and release. Edit the description color to change the color of the bar on the graph. See Graphic Properties - Description Tab on page 25.



Use the **Hot Button** button to create a new button area for the operator to select graphic screens. Position the cursor at the location of the top left corner of the button area. Click, hold and drag the box to the low right corner of the button area and release. See the Graphic Properties - Description Tab on page 25 and the Graphic Properties - Button Area Tab on page 28 to configure the button properties.



The **Application** button allows the user to start embedded applications. Click the button and select an application from the menu. Position the cursor at the location of the top left corner of the button area. Click, hold and drag the box to the low right corner of the button area and release. The available applications depend on your specific application.



The **Alarm Acknowledge** button creates a button area that will acknowledge all active alarms without having to open the Server Alarm window.



The **Console Connection** will add a button to the operator screen that will display the Console View - Engineering System window if you are using a standard PC based control system.



The **Trend Select** button will add a button to the screen that will allow the operator to display a real time trend for one analog data point. Click on the button to display the Analog Database Selection window. Click the desired analog data point and then click select. Drag the button to the desired location and click to drop it. The button can be set up so that the operator can select any analog point to display after he clicks the button. To set the button up with the operator select configuration, add a Trend Select button with any data point and then edit the Selector ID on the Graphic Properties - Data Tab on page 26 to equal 0.

# **Graphic Tools - Library Tab**

Select the Library tab at the top left on the Graphic Tools window (**Screen 19**). This will take you to the Automation Library tools. Use the up and down arrow keys to scroll through the available library elements.



Use the **Select Library Object** button to insert the displayed library element or the screen.

### **Graphic Properties**

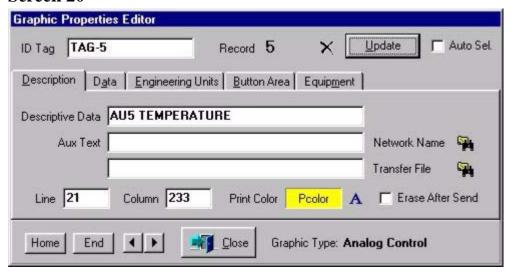
Graphic Properties can be edited by clicking on a graphic's hot area while in the Edit Screen mode. This will display the Graphic Properties Editor **Screen 20**. Select a tab to modify the current properties. Once the changes have been made to the editor, **you must click the Update button or hit the Enter key to accept the changes**. Click the close button to exit the Graphic Properties Editor.

The *Line* and *Column* items indicate the location of the data on the screen in pixels. Changing these values will move the location of the text description. The *Print Color* button and the A will change the descriptions color and font type. These attributes are used for the *Description*, *Data* and *Engineering Units* tabs.

**Hint**: Once you have made the desired changes to the graphic, you may select another graphic's hot area without closing the Graphic Properties Editor. Be sure to click the *Update* button or hit the *Enter* key before you do this or your changes will not be saved.

## **Graphic Properties - Description Tab**

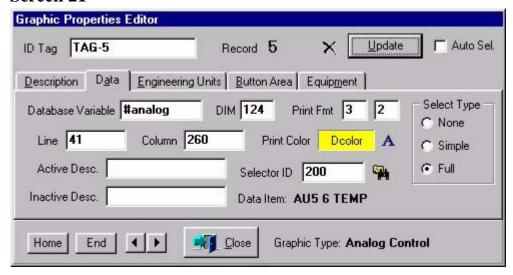
The *Description Data* box (**Screen 20**) contains the description that is displayed with digital or analog text values. Placing the @ symbol in front of the description will make the description invisible.



## **Graphic Properties - Data Tab**

Click on the Data tab to display **Screen 21**. To change the graphics current *Data Item*, click on the browse button next to the *Selector ID*. The Signal or Analog Database Selection window will be displayed and allow the selection of a new *Data Item*.

#### Screen 21



The *Print Fmt* entries indicate the number of digits to the left and right of the decimal point. **Screen 21** indicates that the data will be displayed with 2 digits to the right of the decimal point.

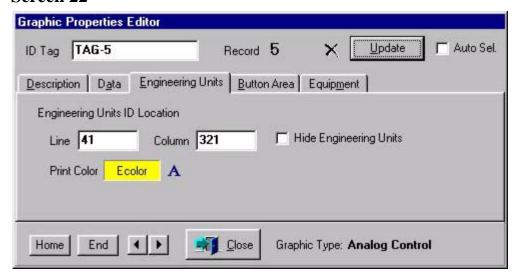
When the *Data Item* is a digital signal point, the *Active Desc* and *Inactive Desc* item will contain the on and off description for the current state of the data point. This allows specific descriptions like running/stopped or open/closed etc. to be used.

The *Select Type* options control the access that an operator has to make changes to a data item and its current value while it is displayed in the control mode. The item is accessed from the screen when the operator clicks on the Hot Area for the item. Select *None* for no operator access. Select *Simple* to allow the operator to change the current value of the analog or digital signal data. Select *Full* to take operator directly to the Signal Database window.

**Warning**: Changing the *Line* and *Column* position will not move the hot area. This will cause text to be written to but never cleared. Use the Graphic Properties - Button Area Tab on page 28 to move the hot area along with the data move.

# **Graphic Properties - Engineering Units Tab**

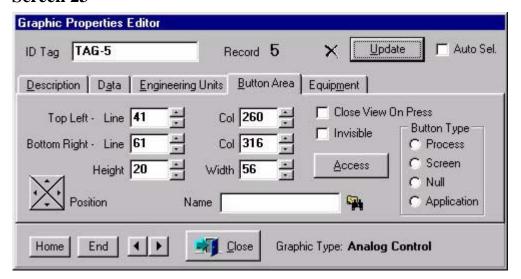
Select the *Engineer Units* tab to edit the Data Item's engineering unit text properties. The *Hide Engineering Units* check box will allow the data to be displayed without the engineering units.



## **Graphic Properties - Button Area Tab**

The Button Area is the hot area that the operator clicks on to edit the signal data, view another graphic screen or start an application. Use the Show/Hide Hot Areas button on the Graphic Tools window (**Screen 19**) to display the active button areas. Use the *Top Left* and *Bottom Right*, *Line* and *Col* entries to edit the corners of the button area or change the *Height* and *Width*. Using the arrow keys to make the change will instantly update any corresponding dimension. Use the *Position* arrows keys to move the button without changing the dimensions.

#### Screen 23

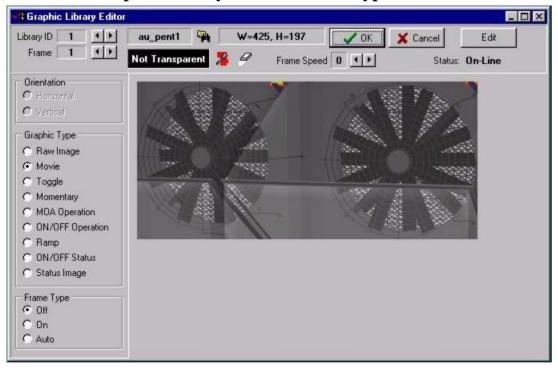


The *Button Type* is set when the button is created from the Graphic Tools Window and should not be changed.

The *Name* is the screen to be displayed when the operator clicks the button area to open a new screen window. The screen name can be selected with the browse button or entered directly.

The *Close View On Press* is used when the button displays a new screen. Select the box to close the current screen window when the new window is opened.

The *Invisible* check box will remove the red button area and the description from the screen. This allows you to make a custom button on the background screen with the bitmap editor.



Screen 24 Graphic Library Editor - Movie Type

## **Graphic Library Editor - Overview of Graphic Animations**

Animated graphics including moving objects, selector switches, push buttons and pilot lights can be created and edited using the Graphic Library Editor **Screen 24**. Access the editor from the pull down menu, by selecting *Application* > *Graphic Library Editor*. Use the left and right arrow buttons to the right of the *Library ID* to scroll through the existing graphics or to find a blank *Library ID* for a new graphic. The arrows to the right of the *Frame* number select the different graphics for the current *Library ID* that will be displayed based on the value of assigned signal data. See **Graphic Properties - Data Tab on page 26**.

The box to the left of the *Browse* button (binoculars), indicates the name of the bitmap source file for the currently displayed graphic *Frame*. To edit the existing bitmap source file, click the *Edit* button. This will start the bitmap editor. Saving the graphic in the bitmap editor will replace the currently displayed *Frame*. To select a different bitmap source file, click the browse button (binoculars) and choose the new bitmap file.

**Note**: The bitmap files for each frame of library items must have the same width and height dimensions. The dimensions are indicated by W= and H= box to the left of the OK button. The width and height are determined by the first bitmap that is selected for a new Library ID. To insure that the second bitmap graphic is the same size, first select Frame 1, then edit the graphic and save it as a new graphic. Select this new graphic for Frame 2. The only way to change the dimensions is to delete the existing library item and select a new bitmap.

To delete a library item, right click on the Graphic Library Editor window and click Delete Item.

Click the *OK* button to accept the edits made to the Graphic Library Editor or choose *Cancel* to abort the edits without saving. Any edits to bitmap files that were saved, will not be effected by clicking the *Cancel* button on the Graphic Library Editor window.

You can create graphics that are not rectangular and contain areas on the graphics that allow the background screen to show through. When you create the graphic with the bitmap editor, select a color to be transparent and fill all the areas on the graphic that you want to be transparent with this same color. Once the graphic is displayed in the Graphic Library Editor, click the *Eye Dropper* button—

then place the tip of the dropper over the color that you want to make transparent and click again. To eliminate the transparent color, click the *Eraser* button—

.

## **Graphic Library Editor - New Graphic Items**

To add a new graphic item to the library, you must first create the graphic bitmaps to be used. New graphic bitmap can be created using any bitmap editor. To use Paint, click the *Windows Start button* > *Programs* > *Accessories* > *Paint*. Draw the graphic and then save it using a name with eight characters or less. Draw and save the cooresponding graphics which will represent motion or an on/off status. Remember to make all of the bitmap graphics the same size by modifying the first bitmap and saving it with a new name. Return to the Graphic Library Editor and use the *Library ID* arrows to select a blank library item. With the first *Frame* selected, click on the browse button (binoculars) and select the name of the bitmap graphic that represents the first status condition. Click the right arrow to select the next *Frame* and use the browse button again to insert the next graphic. Check the buttons for the desired *Graphic Type* and *Frame Type*. Reference the specific details of the graphic type below to complete the graphic creation process.

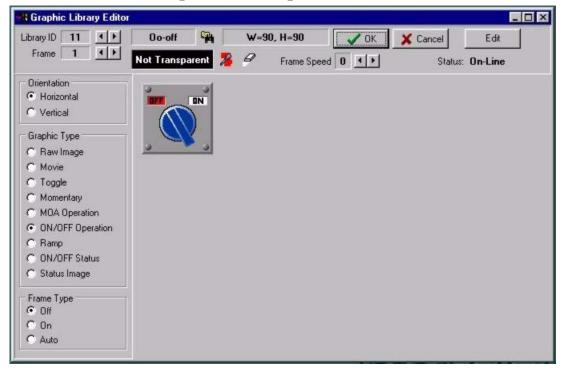
# **Graphic Library Editor - Movie**

Graphic items with the *Movie* button checked will scroll through up to six graphic frames to create a graphical animation or movie **Screen 24**. The animation is in motion when the assigned data signal is active. The speed that the movie is played can be controlled with the *Frame Speed* arrow buttons. A higher number will slow the speed of the animated motion.

# **Graphic Library Editor - Toggle**

Check the *Toggle* button **Screen 24** to create a graphic that will turn a data signal on and off when the operator clicks anywhere on the graphic. Graphic *Frames* 1 and 2 display the on and off state of the data signal. Check the *On* button for the frame that you want to display in the on state then select the other frame and check the *Off* button for the frame you want to display in the off state.

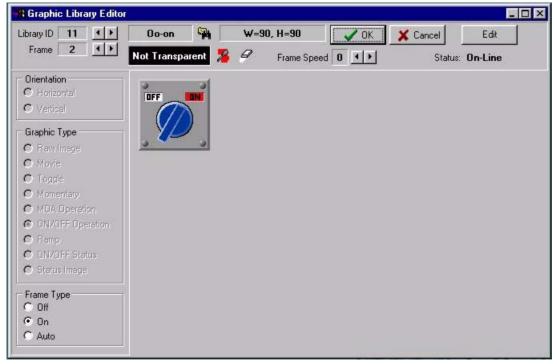
# Screen 25 ON/OFF Operation, Off position



## **Graphic Library Editor - ON/OFF Operation**

Click the *ON/OFF Operation* button to create an ON/OFF control button of a signal data point (**Screen 25**). Clicking the *Horizontal* button enables the operator to turn the signal off and on by clicking on the left and right half of the graphic. With the *Horizontal* button selected as the *Orientation*, the *Frame* 1 graphic will be displayed when the operator clicks on the left half of the graphic. At the same time, the *Frame* 1 selected *Frame Type* condition (Off as shown on **Screen 25**) becomes active for the signal data.

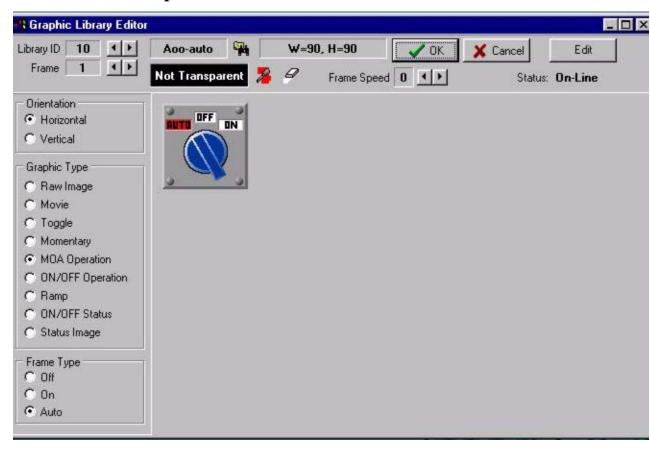
# Screen 26 ON/OFF Operation, On position



If the operator clicks on the right half of the screen graphic, then the *Frame* 2 graphic is displayed and the *Frame* 2 selected *Frame Type* condition (On as shown on **Screen 26**) becomes active for the signal data.

Clicking the Vertical button will change the active areas on the graphic. The operator can now click on the top and bottom of the graphic to change the signal data and displayed graphic. When the operator clicks the top half of the graphic, the *Frame* 1 graphic of the library element is displayed and the selected *Frame Type* condition is set for the signal data.

## **Screen 27 MOA Operation**



# **Graphic Library Editor - MOA Operation**

Click the *MOA Operation* button for Manual On - Off - Automatic control type selector switch **Screen 27.** Use *Frames* 1,2 and 3 then check appropriate *Frame Type* for the corresponding graphic. **Screen 27** shows the *Auto* button checked for the Auto position of the selector switch graphic. When the graphic for *Frame* 1 is displayed on the operator's screen, clicking on the right half of the graphic will display the graphic and set the corresponding signal data value for *Frame* 2. While the *Frame* 2 graphic is displayed, the operator can choose to click the left half of the graphic to return to Frame 1 or click on the right side to display the Frame 3 graphic. Again, the corresponding signal data values will be set when the graphic is displayed. The value sent to the controlled signal data is 0 for *Off*, 1 for *On* and 2 *Automatic*.

# **Graphic Library Editor - ON/OFF Status Image**

Click the *ON/OFF Status Image* to display a graphic to indicate when a signal data point is on and off. Select the graphic that represents the "ON" state on the data signal in *Frame* 1 then check the *On* button for the *Frame Type*. Use *Frame* 2 to display the "OFF" state on the data signal. Select the corresponding graphic and check the *Off* button for the *Frame Type*.

# **Graphic Library Editor - Status Image**

Click the Status Image button to swap up to six different graphics based on a single data signal. The *Frame* 1 graphic will be displayed when the analog signal data is equal to 1. The Frame 2 graphic will be displayed when the analog signal data is equal to 2 etc. This could be useful to indicate multiple states, colors or positions of the automated equipment.