

## Stand-alone uM260 Data Entry – LAN Version, Web Browser Interface

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### *Introduction*

In addition to the text menu interface for both the LAN and modem versions of the uM260, another option for accessing and performing data entry on a LAN version of the uM260 is to use a Java-supported web application. This interface greatly simplifies both the data entry process and the accessing and viewing of uM260 device information.

***Please be advised that in order to use this method, your computer must be equipped with J2SE Runtime Environment 5.0 Update 6, or later, available from Sun Microsystems, Inc.*** Instructions for installing the Java Runtime Environment are described below.

### *IP Programming Requirement*

In order to perform data entry on a LAN version of the uM260 via the web browser interface, you will also first need to program the IP address information into the uM260 using the serial cable provided with the shipment. Because this setup function requires a specialized instruction set, it is recommended that the procedure be performed by an authorized network administrator or IT person. Instructions for performing the procedure are described on the System Studies website ([www.airtalk.com/reference14.html](http://www.airtalk.com/reference14.html)). Click on *Software Documents*.

Once you have fulfilled these requirements, you can access the uM260 monitor from your Windows-based computer using your favorite browser. Recommended web browsers are: Microsoft Internet Explorer (Versions 5, 6 and 7), Netscape (Versions 7 and 8), and Mozilla Firefox (Versions 1.5 and 2.0).

**Note:** If you are unfamiliar with the procedures for downloading applications from the Internet or do not have authorization to perform these procedures, please contact the individual(s) within your company who can assist you. Explanations are provided below for installing the necessary JRE.

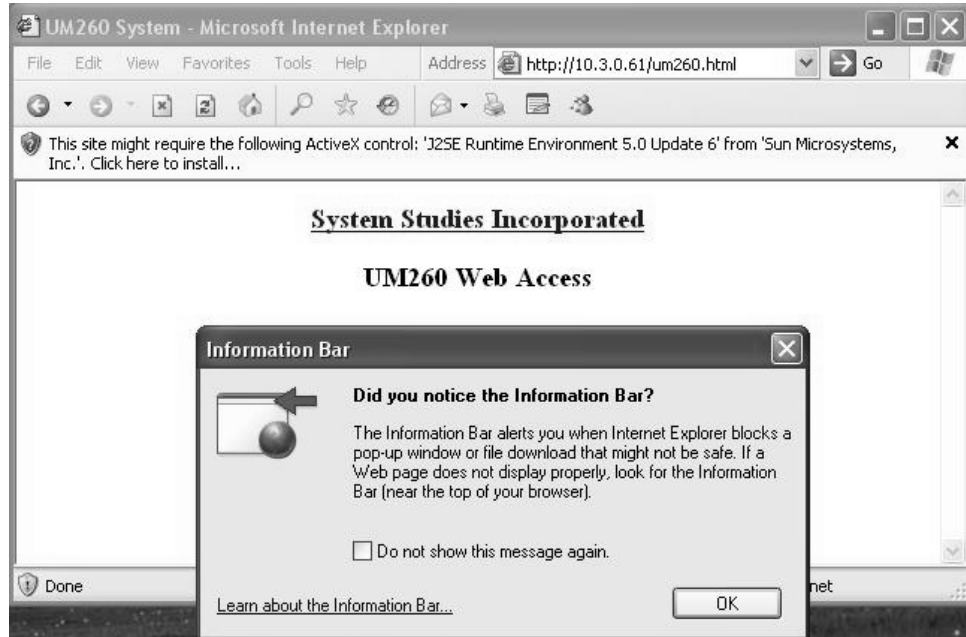
## Updating the JRE

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To see if your system needs to be updated to the latest Java runtime environment, you will need to open your browser and access the uM260 by typing the uM260's IP designation on the address line of the web browser. The Java Runtime Environment (JRE) installation may look a little different from what is shown below based on the operating system you are using. The following information outlines what to expect for an Internet Explorer browser on a Windows XP operating system:

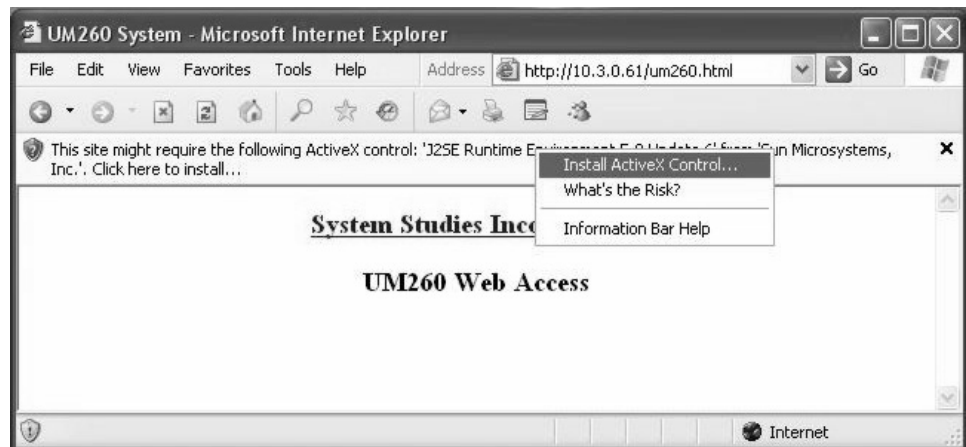
**Procedure:**

- 1) Start by opening up your web browser (in this case, Internet Explorer) and type the following in the address line: ***http://<insert uM260 IP address>/um260.html***. A typical browser entry might look like this: <http://10.2.0.144/um260.html>. Next, you should see the following:



**Screen 1: JRE Update Info Message**

- 2) Click the **OK** button and then click on the tool bar. The following selection options should appear in the drop down menu:



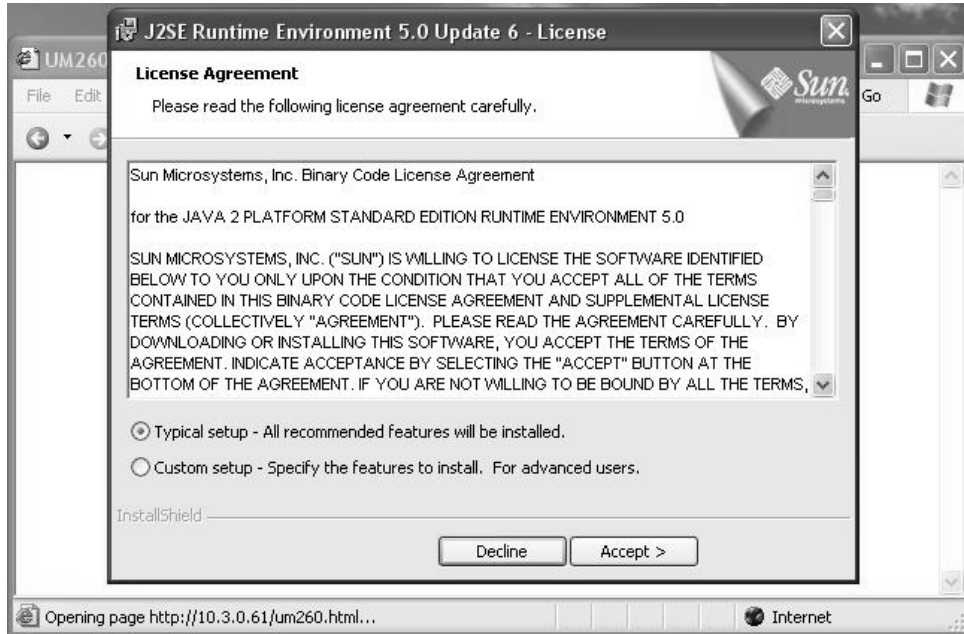
**Screen 2: ActiveX Control Option**

- 3) Select **Install ActiveX Control** to begin the installation of the Java Runtime Environment. As the install begins, the following security message is displayed:



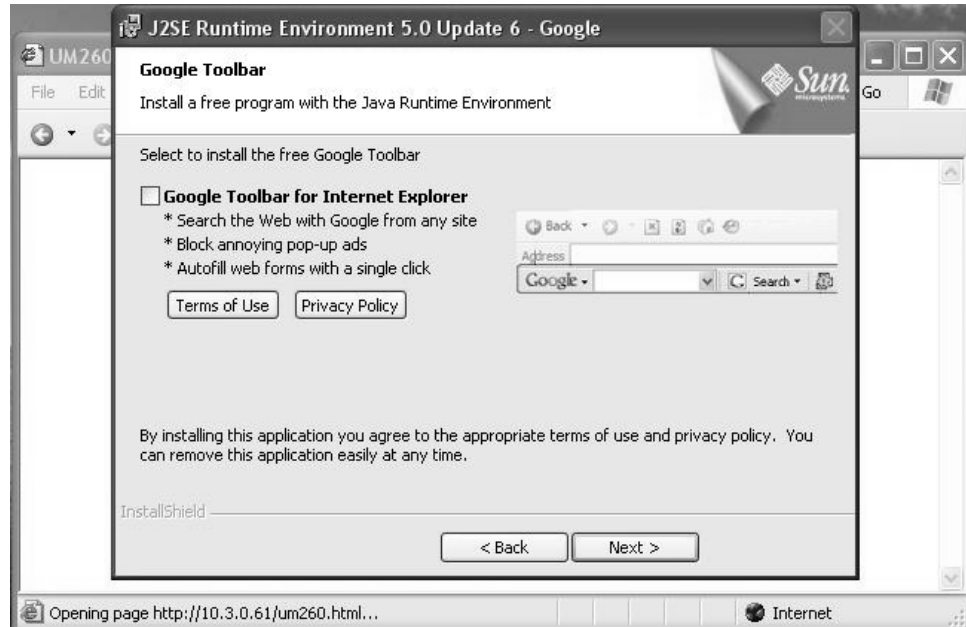
Screen 3: Security Warning

- 4) If you receive the Security Warning message above, click on the **Install** button which will allow the JRE installation to execute. A license agreement, shown below, is presented.



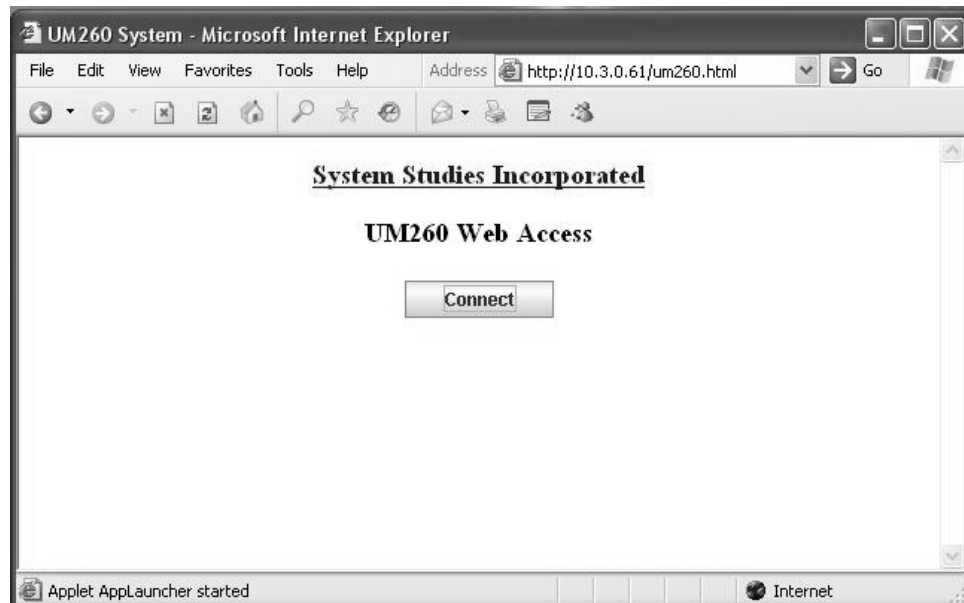
Screen 4: Installation License Agreement

- 5) Select *Typical setup* and click the *Accept* button to continue with the installation. The Google Toolbar Installation Notice appears.



Screen 5: Google Toolbar Installation

- 6) Unclick the *Google Toolbar for Internet Explorer* box (unless you want to install it) and click *Next*. After the Java Runtime Environment installation is complete, the uM260 Web Access window should display, as shown below. At this point, you are ready to click the *Connect* button to log into the uM260.



Screen 6: uM260 Web Access

After installing the java runtime environment, if needed, you can proceed to the uM260's web application which is detailed below. If for some reason, the install doesn't work, please contact your System Administrator or IT representative.

## uM260 Setup and Data Entry

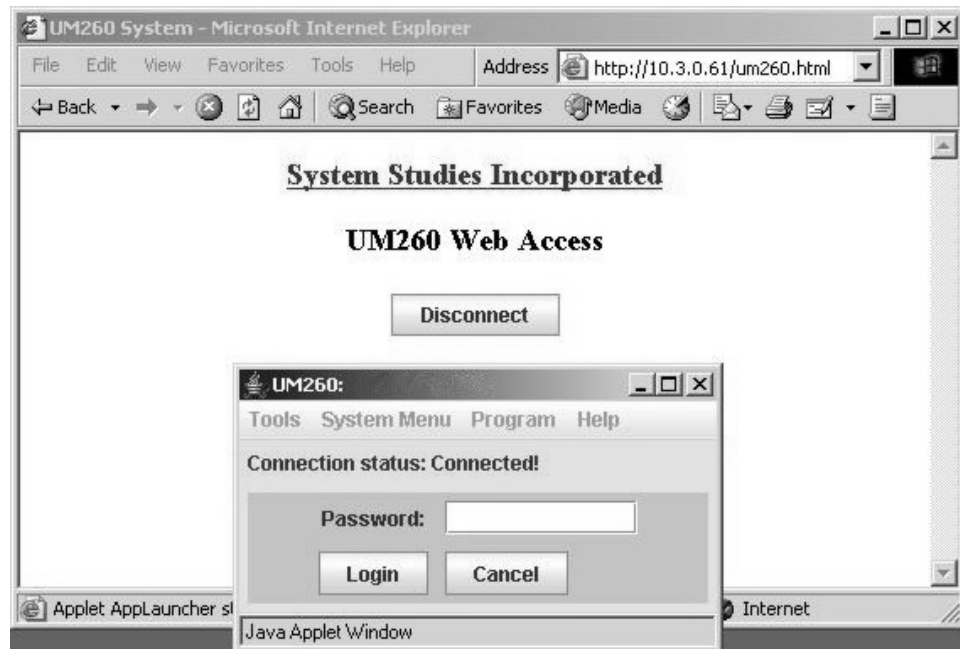
Once the necessary software is in place, you can begin the uM260 data entry process from your web browser. The browser Java Applet utility provides an easy-to-use option for setting up the uM260 and accessing information.

Since only one person at a time can access the monitor, the Java Applet has been set to time out after five minutes of inactivity. This prevents a user from tying up the monitor if he/she becomes distracted before finishing with the application and logging out.

### Procedure:

#### Logging On

- 1) Start by pressing the **Connect** button (Screen 6). The *Connection Status* window will display as shown in Screen 7. Note that the button name will change to *Disconnect* after the login screen is displayed in a separate window.

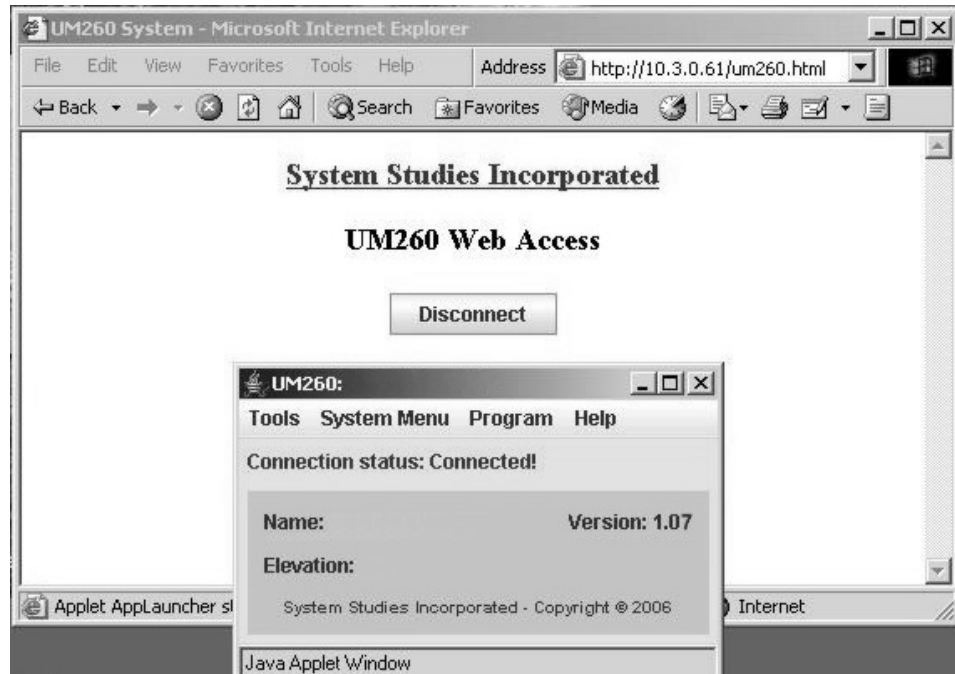


Screen 7: uM260 Login

- 2) Enter the default edit password used by the uM260. There are two default passwords assigned for accessing to the uM260: *airtalk1* (for general read-only user access to device data) and *airtalk2* (for setting up the system and performing device data entry). To perform the data entry procedures that follow, enter *airtalk2* and click the **Login** button.

**Note:** Once you have logged into the application, it is recommended that you change these default passwords by using the Password Change Options screen under *System Menu* (see explanation beginning on next page). It is important to notify the individuals who will be using the application that you have changed the password.

After a successful login, you should see the uM260's default screen (below), and the tool bar should be enabled for usage.



Screen 8: Connection Status

The default information includes the system *Name*, *Version* of the firmware running on the uM260, and the *Elevation* data. As you can see, initially only the firmware version number is displayed. You can provide the other information, as described below.

### **Defining System Settings**

After connecting to the uM260, you can choose to select the *System Menu* and configure the monitor or select *Program* and begin entering device data. The *Tools* menu provides the singular option of scanning device readings once they have been entered. The instructions below begin with the *System Menu*, from which you can perform the following functions:

- **Set Up Alarm Email**—Enables you to enter the IP address and port number of the designated mail server. This is a prerequisite to defining email addresses for alarm distribution.

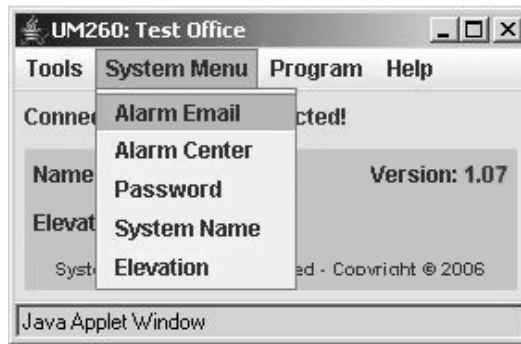
- **Define the Alarm Center**—Provides options for setting up the uM260’s alarm notification function (IP address, port number, etc).
- **Establish new passwords**—Enables you to change both the default User (read-only) Password and the Edit (data entry) Password for the system.
- **Set System Name**—Used to specify the name of the uM260 installation (typically the name of the office or Controlled Environmental Vault in which the monitor is installed).
- **Enter Elevation**—Allows you to designate the elevation of the uM260 installation location. This information is used to zero-correct any High Resolution Pressure Transducers (4–20 mA device) that are used in the system.

*Note:* The first two options on the System Menu enable you to set up the uM260’s Alarm Email and Alarm Center, neither of which should be done until the device data has been entered. Procedures for configuring the Alarm Center are described at the end of this section. What follows below are instructions for defining the other System configuration possibilities.

**Procedures:**

*Selecting System Menu*

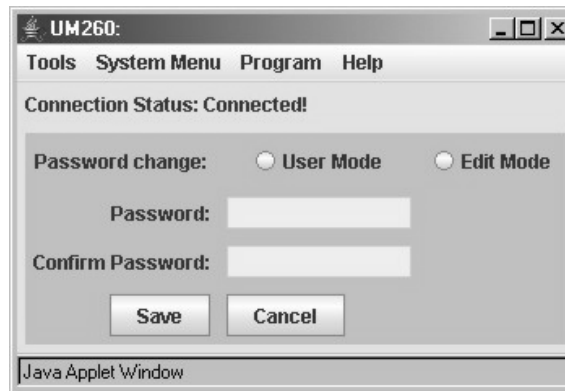
- 1) Click **System Menu** from the Java Applet’s menu bar. You will see the available options displayed as follows:



**Screen 9: System Menu Options**

*Changing Passwords*

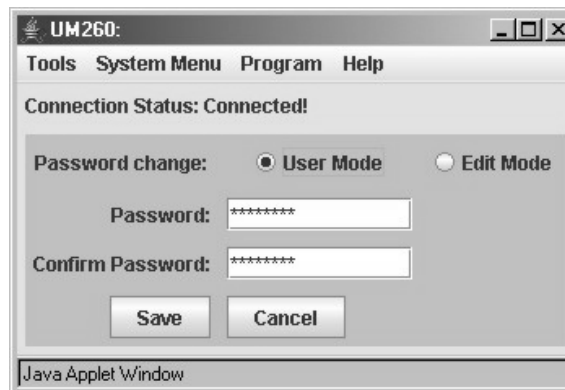
- 2) Using your mouse pointer, highlight and click **Password**. The Password Change Options screen displays, as shown on the following page.



Screen 10: Password Change Options

This screen allows you to change the *User Mode* and *Edit Mode* passwords on the uM260. This system administrative function prevents unauthorized access to the configuration and data entry sections of the monitor, and ensures that only users with the assigned password can access the system. If you change the passwords, make sure to inform the necessary individuals.

- 3) Click on the radio button for the desired password access mode, and the two password text fields will be populated with eight characters representing the default passwords (shown below).



Screen 11: Password Editing

- 4) Click in the **Password** data field and carefully type the desired new User password. Select the *Confirm Password* field and retype your entry. Make a note of this password change and store it away for future reference, if necessary.
- 5) Click the **Save** button to record your changes. A small window (shown below on the next page) requests final confirmation before the password change takes place.





Screen 12: Password Change Confirmation

- 6) Click the **OK** button to complete the process.
- 7) Repeat steps 3 through 5 to change the Edit Mode password, if desired.
- 8) When you have finished updating the password information, click the **Cancel** button on the Password Editing Screen to return to the main Java Applet window.
- 9) The next setup procedure is to define a system name for the uM260. Click the **System Menu** from the Java Applet's menu bar and scroll down to *System Name*. Click this selection, and the following screen displays:

*Specifying the System Name*



Screen 13: System Name Selection

- 10) Click in the text box and type the desired name for the uM260 monitor. Typically, the System Name represents the office or environmental hut location where the monitor is installed. Once you have entered the uM260 name, click the **Save** button. The software then asks for confirmation:



Screen 14: System Name Confirmation

- 11) Click **OK** and the System Name Selection applet redisplay, showing the name you entered. Notice also that the System Name now displays on the title bar of the applet as shown below:



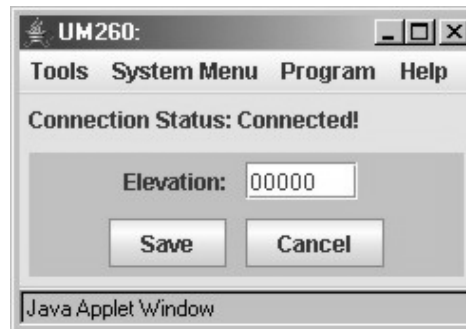
Screen 15: System Name Entered

- 12) Click the **Cancel** button to redisplay the main Java Applet window where you can now enter the elevation where the monitor is installed.

*Setting the Elevation*

*Note:* An *Elevation* value is required for installations where the System Studies High Resolution Pressure Transducers are used. These 4–20 mA transducers are zero calibrated at sea level relative to a perfect vacuum to provide greater reading resolution and accuracy than resistive output transducers. When these pressure devices are installed at higher altitudes, there is less pressure exerted on the internal sensor, which results in a correspondingly lower reading. The *Elevation* footage entered provides an offset for the lower barometric pressure that affects the transducer readings.

- 13) From the main Java Applet window, click **System Menu** and **Elevation** from the drop down selection. The following window displays:



Screen 16: Elevation Selection

- 14) Click in the text box and enter the approximate elevation in feet at the location where the uM260 is being installed. Next click the **Save** button, and the message on the following page will display.



**Screen 17: Elevation Confirmation**

- 15) Click **OK** and the Elevation Selection applet redisplay, showing the elevation that you entered.

With the exception of Alarm Center data entry, this completes the System Menu setup requirements. Once again, it is recommended that Alarm Center data is the last information entered before you place the monitor online.

### **Defining Device Settings**

The next step in setting up the uM260 monitor is to build the device database, which is a simple process for identifying the four possible binary devices, the sixteen possible resistive and/or loop current transducers, and the single control relay. *Please note that programming device data into the uM260 (performing the actual data entry function described below) is not required if you intend to have the uM260 monitored by PressureMAP. For these applications, it is necessary only to program the office and device data into PressureMAP, and PressureMAP will then populate the uM260 database with the required information.*

#### *Data Entry Form*

To assist in the data entry process, it is recommended that you assemble your device information. On the last page of this document is a Data Entry Form that can be photocopied and used for this purpose. Example 1 on the following page shows a completed version for reference. The document helps you to organize monitoring device data, assign access (device) numbers, record device locations and specify alarm thresholds.

uM260 Micro Monitor Data Entry																										
Office:		ANYONE						Date:		5/14/07																
Device	Location (18 characters maximum)						Device Type (9 characters maximum)			Alarm Threshold (4 max.)																
BINARY CONTACTS	1-1	D	R	Y	E	R	1	-	M	A	J	O	R	C	P	A	M	S	T	D	O	P	E	N		
	1-2	D	R	Y	E	R	1	-	M	I	N	O	R	C	P	A	M	S	T	D	O	P	E	N		
	1-3	D	R	Y	E	R	2	-	M	A	J	O	R	C	P	A	M	S	T	D	O	P	E	N		
	1-4	D	R	Y	E	R	2	-	M	I	N	O	R	C	P	A	M	S	T	D	O	P	E	N		
TRANSDUCCERS	2-1	P	P	A	N	E	L						C	F	/	4	7	.	5			2	6	.	0	
	2-2	D	I	S	T	.	P	A	N	E	L			C	F	/	1	9	.	0			1	5	.	0
	2-3	M	H	_	6								C	P	A	3	0					5	.	0		
	2-4	M	H	_	9								C	P	A	3	0					5	.	0		
	2-5	M	H	_	9								C	P	A	3	0					5	.	0		
	2-6	M	H	_	9								C	P	A	3	0					5	.	0		
	2-7	M	H	_	1	7							C	F	/	9	.	5				6	.	0		
	2-8	M	H	_	1	9							C	P	A	3	0					5	.	0		
	2-9	M	H	_	1	9							C	P	A	3	0					5	.	0		
	2-10	M	H	_	2	7							C	P	A	3	0					3	.	0		
	2-11	M	H	_	3	1							C	F	/	9	.	5				6	.	0		
	2-12	M	H	_	3	1							C	P	A	3	0					7	.	5		
2-13																										
2-14																										
2-15																										
2-16																										
CONTROL RELAY	3-1																									

Example 1: Completed Data Entry Form

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## Data Entry Form Column Explanations

As you can see on the completed form sample above, only four types of data are required for each device programmed into the uM260 monitor:

- **Device Number** (referred to as Access Number in the data entry editor)  
As stated previously in this manual, there are three Device Number or Access Number categories that are used for the uM260 Micro Monitor: numbers 1-1 to 1-4 are reserved for the four possible binary devices; numbers 2-1 to 2-16 are used for resistive and loop current transducers, as well as special application contact alarm devices; and number 3-1 designates the control relay device. Notice when filling out the uM260 Data Entry Form that the binary contacts are listed first (rows 1 to 4), followed by the sixteen possible transducers (rows 5 to 20). The last row on the form is used to record the control relay information.
- **Device Location**  
This 18-character field is used to identify where the device is installed in the system (e.g. manhole designation and street address, pole number, central office equipment designation, etc.)
- **Device Type** (designates both the type and function of the monitoring device)  
Table 1 on the next page lists 28 possible device types that can be assigned to the uM260's resistive or loop current transducers, as well as the output range or function of each. The last three functions on the table (mA, kohm and Uninstall) can be used to generate test data or remove an assigned device type.

Please note that the device types on this table do not pertain to the four binary contact alarms (Devices 1-1 through 1-4) that can be programmed into the uM260. The pre-designated, default Device Type for these binary contacts is ***CPAMS TD***.

Please refer to Table 1 when completing the uM260 Data Entry Form.

- **Alarm Threshold** (identifies the point at which a device goes into alarm)  
Binary devices provide an *OPEN* or *CLOSED* condition that is determined by the Device Type assigned. Resistive and current loop transducers need to be programmed by the user to generate an alarm. For a flow transducer, an alarm will be generated when the monitored flow rate increases above the set threshold value; a pressure transducer alarms when monitored pressure drops below the established threshold.

Once the uM260 Data Entry Form has been completed and checked for accuracy, you can proceed to build the uM260 database as described in the following pages.

<b>uM260 Micro Monitor Device Types</b>	
Device Type	Output Range
CF/9.5	Current Flow TD: 0-9.5 SCFH
CF/19.0	Current Flow TD: 0-19 SCFH
CF/47.5	Current Flow TD: 0-47.5 SCFH
CF/95	Current Flow TD: 0-95 SCFH
CF/190	Current Flow TD: 0-190 SCFH
CF/475	Current Flow TD: 0-475 SCFH
CF/950	Current Flow TD: 0-950 SCFH
RF/9.5	Resistive Flow TD: 0-9.5 SCFH
RF/19	Resistive Flow TD: 0-19 SCFH
RF/47.5	Resistive Flow TD: 0-47.5 SCFH
RF/95	Resistive Flow TD: 0-95 SCFH
RF/190	Resistive Flow TD: 0-190 SCFH
RF/20	Resistive Flow TD: 0-20 SCFH
RF/50	Resistive Flow TD: 0-50 SCFH
RF/100	Resistive Flow TD: 0-100 SCFH
RF/200	Resistive Flow TD: 0-200 SCFH
Baro	Barometric Pressure Transducer—range 20.6 to 91.1 inches of Hg
CPA 30	Current Pressure: 0-30 PSI
RP(9.5)	Resistive Pressure: 0-9.5 PSI
RP/HP-PSI	Resistive Pressure: 5-14.5 PSI
540/270	Contact Alarm (540 / 270K ohms)
AC/115	Contact Alarm for measuring 115VAC— 540K ohms reading: OK; 270K ohms: Alarm
DRYER	Contact Alarm for measuring 115VAC— 540K ohms reading: OK; 270K ohms: Alarm (same as AC/115)
RR/540K	Contact Alarm. 540K ohms: OK; short reading: Alarm
CL/THEFT	Contact Alarm. Current (4-22mA) cable theft monitoring device
TANK_PCT	Current pressure: 0-3000 PSI. Used to report the percentage of capacity remaining in a nitrogen tank
mA	Generates reading in milliamperes
kohm	Generates resistance reading
Uninstall	Removes previously assigned Device Type entry

**Table 1: uM260 Device Types**

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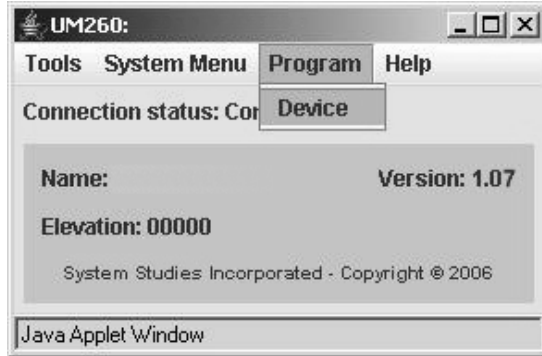
### Accessing the Device Editor

The data entry steps below describe how to access the required data entry screens and program the device information that you have compiled on the uM260 Data Entry Form into the monitor's database.

**Procedures:**

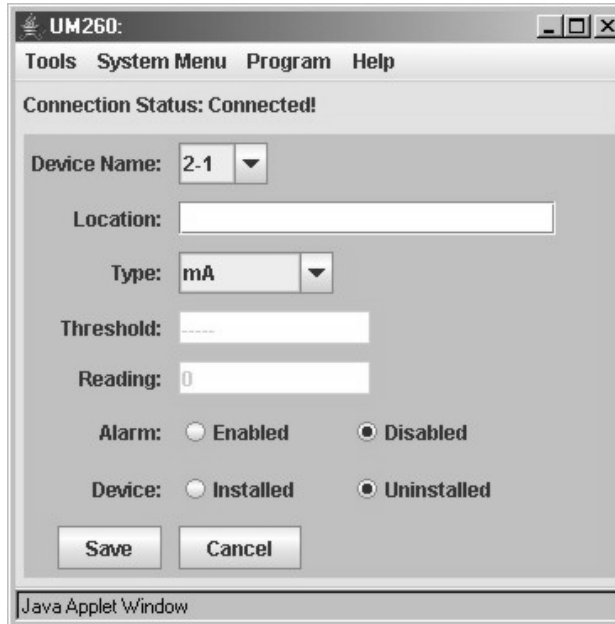
*Program Selection*

- 1) From the Java Applet's menu bar, highlight the **Program** option. The following screen displays:



**Screen 18: Program Selection**

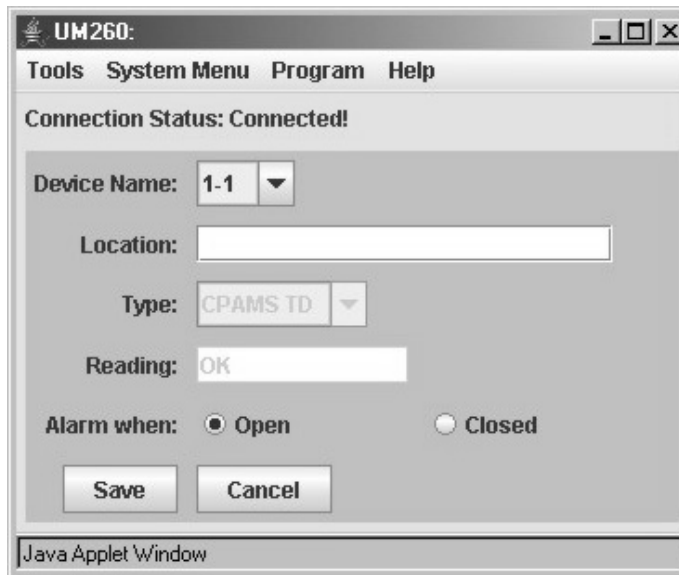
- 2) Click the **Device** option. The Device Data Entry screen displays, showing *2-1* as the default *Device Name*.



**Screen 19: Device Data Entry Window**

*Entering Binary Device Data*

- 3) The four possible binary (simple on/off) devices used with the uM260 are designated as *Device Names* 1-1 through 1-4. To add binary device information to the monitor's database, click the down arrow to the right of the *Device Name* text box. You will then need to use the scroll bar to select device designation 1-1 to enter the first binary device. The following screen displays:



Screen 20: Binary Device Data Entry

Notice that the data in the *Type* and *Reading* boxes are predetermined, read-only values for these binary devices. Once you select the binary *Device Name*, the only remaining data entry requirements are to add *Location* information and alarming information, the latter of which designates if the device alarms in the *Open* or *Closed* state.

**Note:** If you have pre-wired the uM260 connector block before performing data entry, make sure that device pair termination pins on the block correspond with the selected Device Name in the Java Applet editor. Please refer to section 3 of this manual for block wiring locations.

*Special Application  
Contact Alarms*

In addition to the binary devices, several special application contact alarm devices can also be monitored by the uM260 (see Table 1 on the preceding page). Those device type designations (e.g. AC/115, 540/270, etc.) pertain only to the transducer category of devices (Device Names 2-1 through 2-16). For additional information on these special contact alarms, contact System Studies Technical Support.

- 4) Click in the **Location** field and type a descriptive name for the equipment being monitored or the physical location of the device. The entry cannot be longer than 20 characters.
- 5) Next, click the radio button which represents how the binary device will alarm (in the Open or Closed state).
- 6) Double check the information you entered for Binary Device 1-1, and click the **Save** button to record your entries. Clicking the Cancel button returns you to the main Java Applet Window where you can select any of the program options provided.



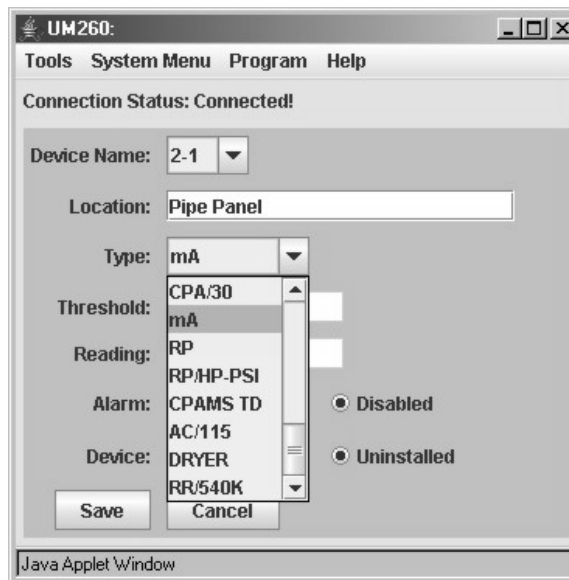
7) Repeat steps 3 through 6 to enter any additional binary devices that may be required.

Entering  
Transducer Data

8) To enter transducer data into the uM260, select *Program*, *Device* from the main Java Applet Menu (Screen 18). Notice that device 2-1 displays opposite the *Device Name* field. The sixteen possible transducer numbers (Device Names 2-1 through 2-16) can be selected by clicking the drop down display and highlighting the desired number.

Device Location  
Designation

9) Type the location where the device is installed in the *Location* text box. The entry cannot exceed 20 characters. Please note that this is the only address information that will be recorded for the device.



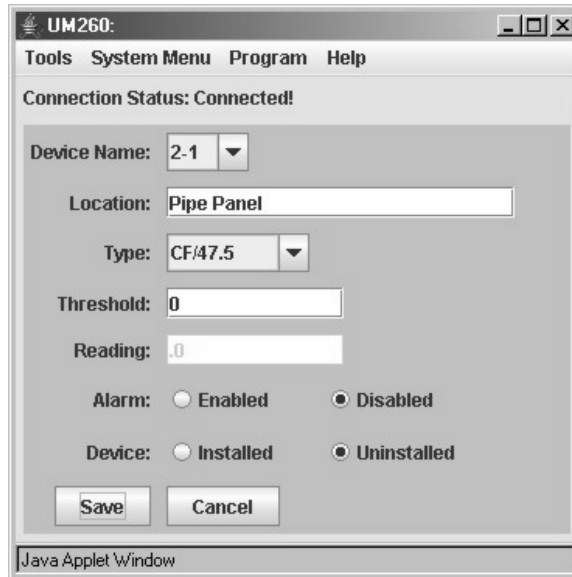
Screen 21: Transducer Device Data Entry

10) Select the *Type* of device from the drop down menu (see example above).

Device Type  
Designation

The *Type* is an alphanumeric designation that represents the type of device (resistive pressure transducer, current flow transducers, contact alarm, etc.) and/or its specific function in the cable pressurization system (such as an AC measuring contact device). For information about Device Types, please refer to Table 1 on page 14 of this section.

In the data entry example below, the Device Type is CF/47.5, which represents a 0-47.5 SCFH current flow transducer.

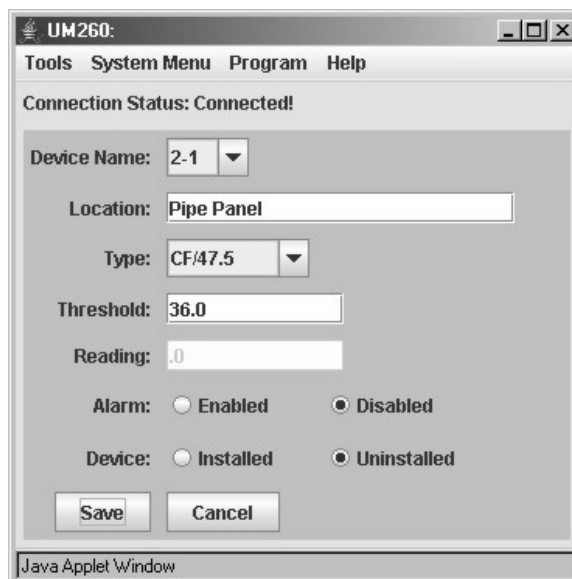


Screen 22: Transducer Device Type Entry

*Device Threshold Designation*

- 11) Once you have designated the *Type* of device, you can specify an alarm **Threshold** value for the device. Enter a numeric value only; the program does not accept alphanumeric values. ***For a flow transducer an alarm will be generated when the monitored flow rate increases above the set threshold value; a pressure transducer alarms when monitored pressure drops below the threshold.***

The screen sample below represents a typical threshold value for the type of device shown. In this example, even though a reading is not shown, the uM260 will issue an alarm when the flow exceeds 36.0 SCFH.



Screen 23: Transducer Threshold Entry

The next text box on the screen, *Reading*, is used to list a reading for the device once the system has been placed in operation and is able to scan devices. During the initial data entry process, this field is empty and cannot be accessed.

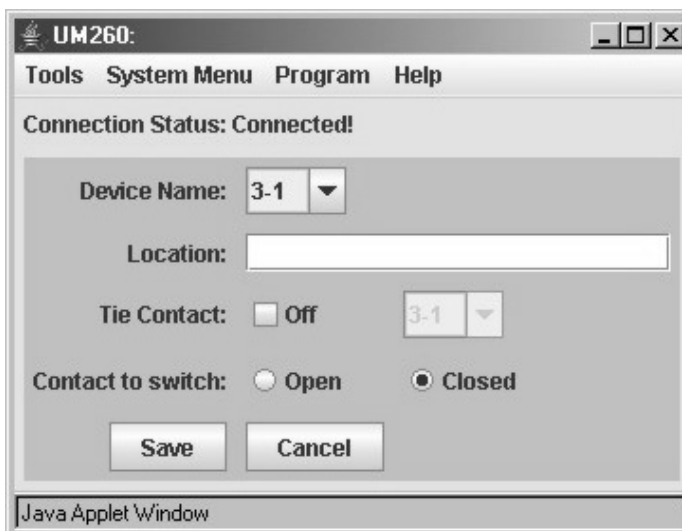
*Device and Alarm Activation*

As you can see in the screen sample above, there are radio buttons that provide the option of enabling or disabling the alarm function for a device. You can also specify whether the device is installed or uninstalled. This second capability makes it possible for you to perform the actual data entry process before the devices in the field have been installed and wired to the uM260.

It is recommended that you leave both *Alarm* and *Device* in the default (Disabled/Uninstalled) state while performing data entry. After you have entered all of the devices into the database and defined the Alarm Center, you will need to select each of the transducers that have been entered into the database and change *Alarm* to “Enable” and *Device* to “Installed.”

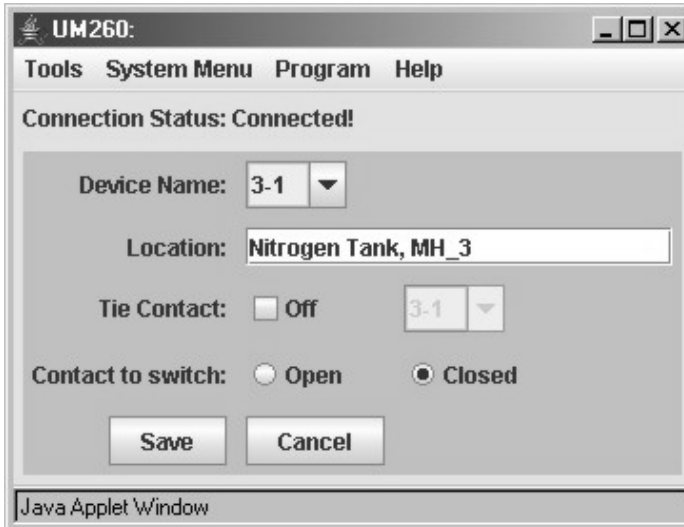
- 12) When you have finished inputting the required information for the first transducer, double check your entries for accuracy and either **Save** the screen or **Cancel**. Clicking on *Cancel* disregards the information you have entered and regenerates the main Java Applet Window.
- 13) Continue entering device information for the other transducers that will be monitored by the uM260 as described in steps 8 through 12 above.
- 14) The uM260 offers direct activation of a single control relay via the *Program, Device* window. In order to display the information for this device, you will first need to select **3-1** from the *Device Name* listing. This is the pre-defined Access Number for the control relay. After selecting device 3-1, the following screen displays:

*Entering Control Relay Information*



Screen 24: Control Relay Data Entry

- 15) Click the *Location* text box and type the name of the equipment or location where the control relay is installed. Screen sample 25 indicates that the relay was installed at a nitrogen tank.



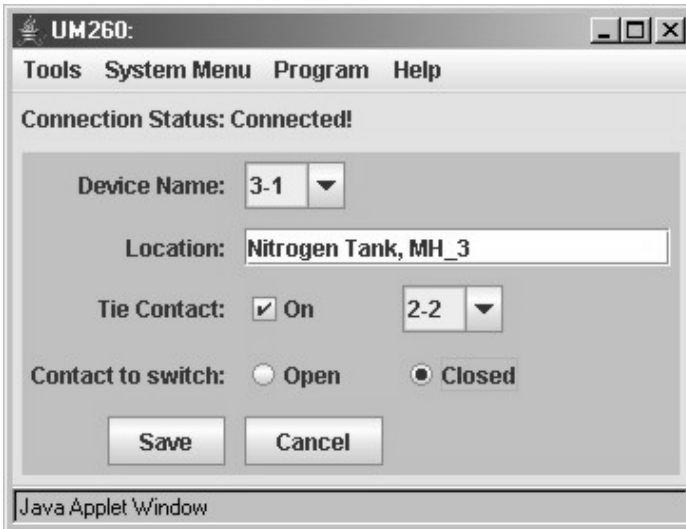
Screen 25: Control Relay Location

The Control Relay Device Screen gives you the ability to tie the control relay to any other monitoring device in the uM260 system. When the control relay is tied to another device, it will activate when the device that it is tied to goes into alarm. For example, a pressure transducer that monitors a specific cable could be set to turn on a nitrogen tank when pressure in the cable drops below the threshold value.

**Note:** Please contact System Studies Incorporated for more information about this device and its applications.

*Tying the Control Relay to Another Device*

- 16) To tie the control relay to another device in the system, click the **Tie Contact** checkbox and select a device from the drop down device menu to the right of the checkbox. Notice that when the *Tie Contact* box is unchecked (Off), the default device is 3-1 and you are not allowed to select another Device Name. If you have set the *Tie Contact* to On, the device that you've tied it to will show up in the drop-down device name box (see next page). When you are ready to save, confirm that this correct device and click the **Save** button.



Screen 26: Completed Alarm Center Data Entry

*Manually Activating Control Relay*

The last programming option on the Control Relay Data Entry Screen gives you the ability to manually activate or deactivate the control relay if you have not tied the relay to another device in the system. There are two radio buttons used for this purpose: the *Open* button deactivates or turns the relay off; the *Closed* button activates the relay. Once again, these manual settings apply only when the *Tie Contact* is set to Off.

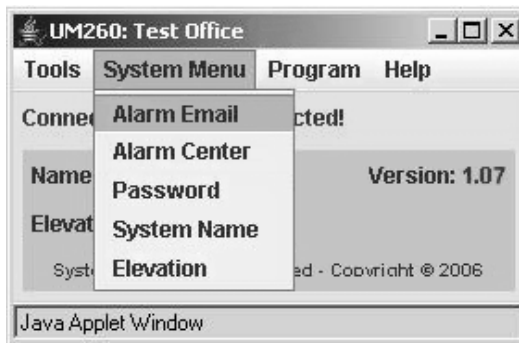
*Alarm Email Information*

**Mail Server Setup**

After the device data entry procedures described above have been completed, it will be necessary to update the uM260’s database with mail server information and alarm distribution email addresses.

**Procedures:**

- 1) Click **System Menu** from the Java applet’s menu bar. You will see the editing options displayed as follows:



Screen 27: System Menu Selections

- 2) From the drop down menu provided, click **Alarm Email** to begin setting up the uM260's alarm dispatching capability. Screen 28 displays:

The screenshot shows a Java Applet window titled "UM260:". The window has a menu bar with "Tools", "System Menu", "Program", and "Help". Below the menu bar, it says "Connection Status: Connected!". The main area contains a form with the following elements: "Enable Center:" with a checkbox set to "Off"; "IP Address:" with four separate input boxes; "Port:" with a text box containing "25"; "Email From:" with a text box; "Email To #1:" with a text box; "Email To #2:" with a text box; "Email To #3:" with a text box; and "Save" and "Cancel" buttons at the bottom. The status bar at the bottom of the window says "Java Applet Window".

Screen 28: Alarm Center Data Entry Screen

**Note:** When setting up the mail server, it is important first to assemble all of the necessary information and then carefully check it for accuracy. In most cases, the IP address and port number of your email server can be obtained from your network/email administrator. Once you have gathered this information, it is a good idea to confirm that a connection can be established before entering the information into the uM260 database.

**! Important !**

- 3) By default, the *Enable Center* checkbox near the top of the screen is set to *Off*. Before you can enter any information, you need to click inside of the checkbox to change it to **On**. If you deselect this box (set it to Off) after you have entered your mail server information, the screen will refresh and you will lose any information you have typed.

*IP Address Designation*

- 4) Enter the *IP Address* of the mail server in the text field spaces at the top of the screen. Press the *Tab* key to advance from one field to the next. Make sure that you have verified the IP address and entered it correctly.

*Port Designation*

- 5) The second mail server data entry requirement is to enter the *Port* used for the mail server. The default value for the mail server is port 25. If this designation needs to be changed, enter the correct port number used for your mail server.

*Server Domain Name*

- 6) The *Email From* entry should identify your uM260 monitor and include the domain name of your server (for example, uM260@yourcompany.com).

*Email Addresses*

- 7) As you can see, it is possible to distribute uM260 alarm notification to three separate email addresses. If you do not define an Alarm Center (as described in the next subsection), only one address is actually required to ensure that alarms are distributed. Click in the *Email To #1* field and type the desired email address of the individual whom you want to receive the alarm notification first. Please note that *Email To #2* and *Email To #3* are not required when saving information to the uM260, but they provide other options for distributing the alarms.
- 8) Tab down to the remaining two email fields and enter additional addresses, if desired.
- 9) When you have entered all of the required data for the mail server and double checked it for accuracy, you will need to save your data by clicking the **Save** button. The completed data entry screen would look similar to the one below.

The screenshot shows a Java Applet Window titled "UM260:". The window has a menu bar with "Tools", "System Menu", "Program", and "Help". Below the menu bar, it displays "Connection Status: Connected!". The main area contains the following fields and controls:

- Enable Center:** A checkbox labeled "On" is checked.
- IP Address:** Four input fields containing the values "10", "1", "1", and "67".
- Port:** An input field containing the value "25".
- Email From:** An input field containing "uM260@yourcompany.com".
- Email To #1:** An input field containing "jjones@yourcompnay.com".
- Email To #2:** An input field containing "tjones@yourcompany.com".
- Email To #3:** An input field containing "qjones@yourcompany.com".

At the bottom of the form area are two buttons: "Save" and "Cancel". The status bar at the very bottom of the window reads "Java Applet Window".

Screen 29: Completed Alarm Center Data Entry

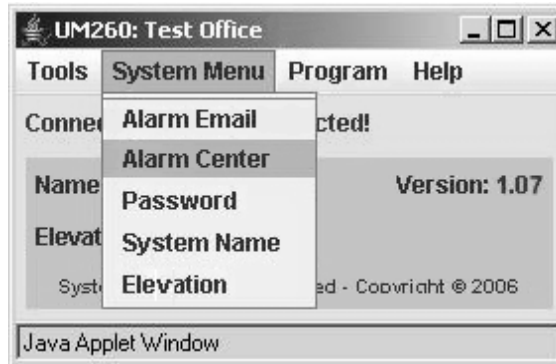
*Alarm Center Information***Alarm Center Setup**

In addition to defining your mail server and email addresses for uM260 alarm distribution, it is also possible to set up a specific Alarm Center to receive alarms. This alarm center may be a network printer, personal computer or other device that is accessible via your local area network.

**Note:** If you intend to use the uM260 with PressureMAP and not as a stand-alone monitor, PressureMAP's Alarm Receiver Port must be defined as the uM260 Alarm Center. In this way, the uM260 can send an alert to PressureMAP whenever a device reading crosses a programmed alarm threshold. Please refer to the *MAP System Data Entry Manual*, "Office Data Entry," for specific information on this requirement.

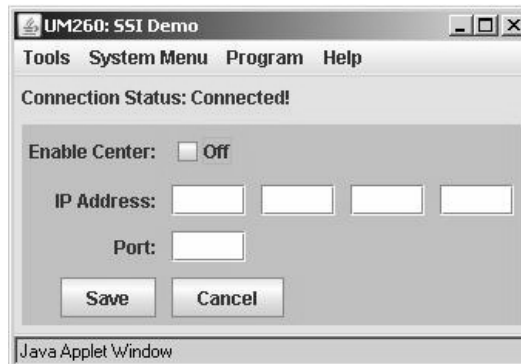
**Procedures:**

- 1) Click on **System Menu** from the Java applet's menu bar. You will see the five editing options displayed below:



**Screen 30: Alarm Center Data Entry**

- 2) From the drop down menu provided, click **Alarm Center** to begin setting up the uM260's alarm dispatching capability. Screen 31 displays:

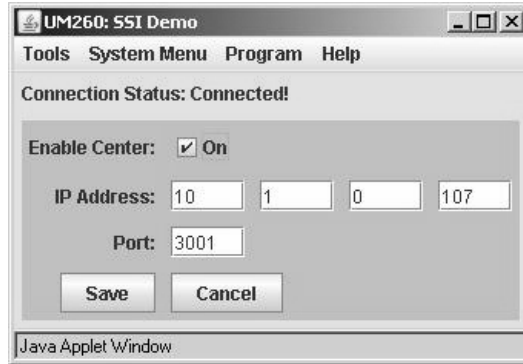


**Screen 31: Center IP Address Data Entry**

- 3) The *Enable Center* checkbox near the top of the screen is normally set to *Off*. Before you can enter any information, you need to click inside of the checkbox to change it to *On*. If you deselect this box (set it to *Off*) after you have entered your Alarm Center information, the screen will refresh and you will lose the information you typed.
- 4) Enter the *IP Address* of the specified Alarm Center equipment in the appropriate text field spaces at the top of the screen. Press the *Tab* key to advance from one field to the next. Make sure that you have verified the Alarm Center's IP address and entered it correctly.



- 5) Next press the *Tab* key to advance to the *Port* data field. The default value for the uM260's designated Alarm Center port is 3001. Enter the port number assigned to the Alarm Center IP address. After you have completed these entries, the screen will look similar to the one shown below.



Screen 32: Center IP Address Information

- 6) If the IP Address information is correct, press the *Save* button at the bottom of the screen. This completes the Alarm Center data entry procedure.

### Alarm Formats

The uM260 generates both individual and multiple alarms, as necessary. Like the test alarm example shown above, each alarm is comprised of a minimum of three lines of information: 1) monitor type—either UM260M (for a modem version) or UM260L (LAN Version); 2) monitor location (typically an office name or office location); and 3) alarm summary information. The alarm summary includes the number and location of the alarmed device, plus a reading which represents a pressure drop or flow increase across a defined threshold, or a verbose contact alarm reading (ALARM, SHORT, etc.). The examples below represent the types of alarms that are generated by the uM260 monitor.

```

UM260L
SW260
2-10 location of dev 2-10 43.4
    
```

```

UM260M
SW260
2-3 location of dev 2-3 SHORT
2-4 location of dev 2-4 38.0
2-11 location of dev 2-11 2.7
1-3 location of dev 1-3 ALARM
1-4 location of dev 1-4 ALARM
    
```

*Enabling Device Readings and Alarming*

### **Placing the System Online**

Before completing data entry and performing the first scan of devices, you will need to go back to the Device Data Entry Screen and enable Alarming on the transducers that you entered. If the transducers were left in their default *Uninstalled* state, you will also need to click the *Installed* radio button to activate the readings. Refer to the explanation following Screen 23 in the preceding subsection for additional information.

*Accessing Realtime Readings*

### **Scanning Device Readings**

The uM260 monitor provides continuous readings of all installed devices approximately three times a minute. You can view, refresh and print a listing of this device data at any time during or after the data entry process by following the steps below.

#### ***Procedures:***

- 1) Click ***Tools*** then ***Scan*** from the Java applet's menu bar. An empty applet window will display. Click the ***Start Device Scan*** button located at the bottom left corner of the window. After a few moments you will see a realtime listing similar to the one in Screen 33 on the following page, which shows the device information you have entered.

Notice that the window has a scroll bar on the right hand side. It is recommended that you use this bar to access the remainder of the device listing rather than try to resize the window.

- 2) Because the monitor is actively updating readings, a ***Refresh*** button is provided on the low left corner to enable you to see the most current readings. Press ***Refresh*** anytime you want to see the latest information. Notice also that you can direct the output of the listing to the printer that has been set up for use with your browser.
- 3) To print the listing, simply click the ***Print*** button at the bottom right corner of the window.

Once the monitor and field devices have been installed and the data entry procedures described above have been completed, the uM260 monitor will begin to gather data and generate alarms.

UM260: Creekside

Tools System Menu Program Help

Connection Status: Connected!

Real Time Device Scan Report

uM260 Name: Creekside Tue Apr 11 15:05:52 PDT 2006

Device	Location	Type	Thresh.	Reading	Last
1-1	DRYER1-MAJOR	CPAMS TD	OPEN	ALARM	ALARM
1-2	DRYER1-MINOR	CPAMS TD	OPEN	ALARM	ALARM
1-3	DRYER2-MAJOR	CPAMS TD	OPEN	ALARM	ALARM
1-4	DRYER2-MINOR	CPAMS TD	OPEN	ALARM	ALARM
2-1	PPanel	CF/47.5	26.0	16.5	16.0
2-2	Dist. Panel	CF/19.0	15.0	8.2	8.6
2-3	MH_6	CPA30	5.0	6.1	6.1
2-4	MH_9	CPA30	5.0	6.5	6.5
2-5	MH_9	CPA30	5.0	5.9	5.8
2-6	MH_9	CPA30	5.0	5.5	5.8
2-7	MH_17	CF/9.5	6.0	5.1	ALARM
2-8	MH_19	CPA30	5.0	6.1	ALARM
2-9	MH_19	CPA30	5.0	5.7	5.4
2-10	MH_27	CPA30	3.0	4.1	4.4
2-11	MH_31	CF/9.5	6.0	4.8	.0

Refresh Print

Java Applet Window

Screen 33: Realtime Device Scan Report

