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## 1. Data-DAQ Software

### 1.1. Main window

This is the main window you will be using to see the values from your devices. Clicking on "Get sample" will make the software immediately connect to each of your devices and retrieve their current values. Clicking on "Settings" will take you to the [Settings window](#). "Auto-sample" will cause the software to start a sample-retrieving countdown for each device. (See [Settings window](#), [Devices panel](#) for how to change this) Clicking on "Miniview" will bring up the [Miniview window](#).

## ***Device panel***

This panel shows all of the devices you have configured, and their current values. To collapse or expand an item, double click it's name, or single click the plus/minus box to it's left. If there are any items missing, it may be that they are hidden. Clicking the "Show hidden items" option will toggle whether or not to override hiding of items. Items may also have information displayed to the right of their name, such as "ALARM" or "(hidden)". If the name of an item is being obscured by it's value, you can resize the device panel by clicking and dragging the separator bar left or right.

## ***Chart-graph panel***

This panel shows a history of data over a selected period of time. Data moves from right to left, with newest data appearing on the right. Each channel of data has it's own data-scale range, which you can view by clicking on either the data itself, or it's corresponding name in the [Device panel](#). The currently selected channel will always appear slightly thicker than normal until you deselect it or select a different item. Note also: If you find that the period of time currently displayed is too short or too long, you can change it from the [Settings window](#), under the [Graph panel](#).

## ***Settings menu***

From this menu you can Save, Reload, Reset, Import and Export your settings. Clicking the last option in the menu will take you to the [Device Configuration window](#).

## **1.2. Settings Window**

This window has three panels for settings up your options for Devices, Alarms and Graph settings. On all three panels you can add, remove and re-arrange your devices.

### ***Devices panel***

On this panel you can specify the address and port for the currently selected device. You can also change the settings for how often to retrieve samples, and where to put the data.

### ***Alarms panel***

After selecting a device to modify, select the channel you would like to modify in the "Channel" drop-down. From there you can add and remove alarms to that channel, as well as modify how the software should respond to alarm states.

### ***Threshold and Hysteresis***

When a reading crosses/reaches the "Threshold" in the manner specified in "Direction", the channel will enter an alarm state. When a reading is found that crosses the Hysteresis

in the opposite "Direction", the alarm will return to a normal state. The program will perform the selected action twice, once for entering the alarm state and once for returning to normal.

### ***Actions: Run a program***

This action is a simple one: Data-DAQ Software will execute whatever is entered in the first field when entering an alarm state, and then execute the second field's line when returning to normal.

### ***Actions: Send an email***

This action is a little harder to set up. In order for Data-DAQ Software to actually send an email, you need to provide it with an SMTP server it is allowed to send messages from. For efficient operation, this SMTP server should be as local as possible to the machine that Data-DAQ Software is running on. When sending an email, the software spawns a new thread to handle the sending of the email. The software may not reliably send a second email if the first is still in the process of being sent.

### ***Actions: Show an alert***

This option should be familiar to administrators of Windows NT/2k/2k3. In the "From" field, enter the local machine's name or IP address (127.0.0.1 should work). In the "To" field, enter the IP address or name of the remote computer (you may enter the local machine's name/IP if desired). If you are unsure if you need to proxy through a remote RPC server, leave this field blank.

### ***Graph panel***

This panel has 1 setting which applies to the entire program, and the rest of the settings apply to the selected channel. Clicking "Copy to all" will copy the current graph settings to the other channels of the selected device.

## **1.3. Direct Configuration window**

This window is used to communicate directly with a single device through it's serial port. You will need to do this only once to set up each device you purchase to have it's own IP address, and optionally to set more descriptive names for each channel.

### ***To connect to your device...***

plug in your 9 to 25 pin serial adapter into the device, and then the 9-pin side into the back of your computer, or into your USB to Serial adapter. In the Direct Configuration window, select the comm port you plugged the cable into, and then click "Connect". Different models have slightly different set-up menus, but all function the same. Enter the

letter of the option you wish to select and press enter. When done, simply un-click "Connect".

## **1.4. Miniview window**

This window is used to keep watch on your devices while you work in other applications. Though the display inside the Miniview window is synchronized with the one in the [Main window](#), you will be unable to bring up the right click menu. Further more, the Miniview display is locked into hiding non-visible items. You may however still collapse and expand devices and group.

## **2. Data-DAQ Software Service Configurator**

### **2.1. Main window**

This window contains all of the settings for each device except for its alarms, which can be configured by clicking on "Edit Alarms", will bring up the [Alarms window](#). Configuration of the device is nearly identical to the procedure used in the [Data-DAQ Software Devices panel](#).

#### ***File menu***

This menu allows you to Save, Reload, Import and Export your settings. The default service-settings path is used when you select "Save settings". Otherwise, Import and Export will ask you where to load from or save to.

#### ***Device menu***

This menu contains many of the functions available on the [Main window](#) itself.

#### ***Service menu***

On this menu you will find functions to control the Service itself. Any changes to the settings will require that you restart the service. The final option in this menu allows you to override some basic options of the service itself, such as where to load settings from. These are described at [Service Arguments window](#).

### **2.2. Alarms window**

In this window you will find various settings for alarms that the service will react too. Note that this window is nearly identical to the [Alarms panel](#) in the [Data-DAQ Software Settings window](#).

## **2.3. Service Arguments window**

The settings on in this window are stored in the settings file for reference, but are applied directly to the service when it is started. You may optionally specify the generated option-line in the Windows services configuration panel.

### ***DataPath option***

This option allows you to specify a default path for devices who's LogFile property are left blank or do not specify a directory.

### ***SettingsFile option***

This option allows you to override loading of the default settings file path. This is useful if access to "[windrive]:\Documents and Settings\All Users\Application Data\MicroDAQ.Com, Ltd\Data-DAQ Software" is restricted.

### ***LogEvents option***

Providing this option will cause the service to generate an "events.xml" file which contains information on various events of the service, such as being started, stopped, or taking readings. This is generally only useful for verify operation of the service and not meant for normal use.