SoftTouch PC Based HMI
Getting Started Guide

SoftTouch is a PC-based HMI software which runs on a PC running Windows XP or Windows 7 operating system. The screens for SoftTouch are designed using EZTouch Editor. Designed screens are then downloaded to the PC running SoftTouch. (Editor and SoftTouch may be on the same computer.)

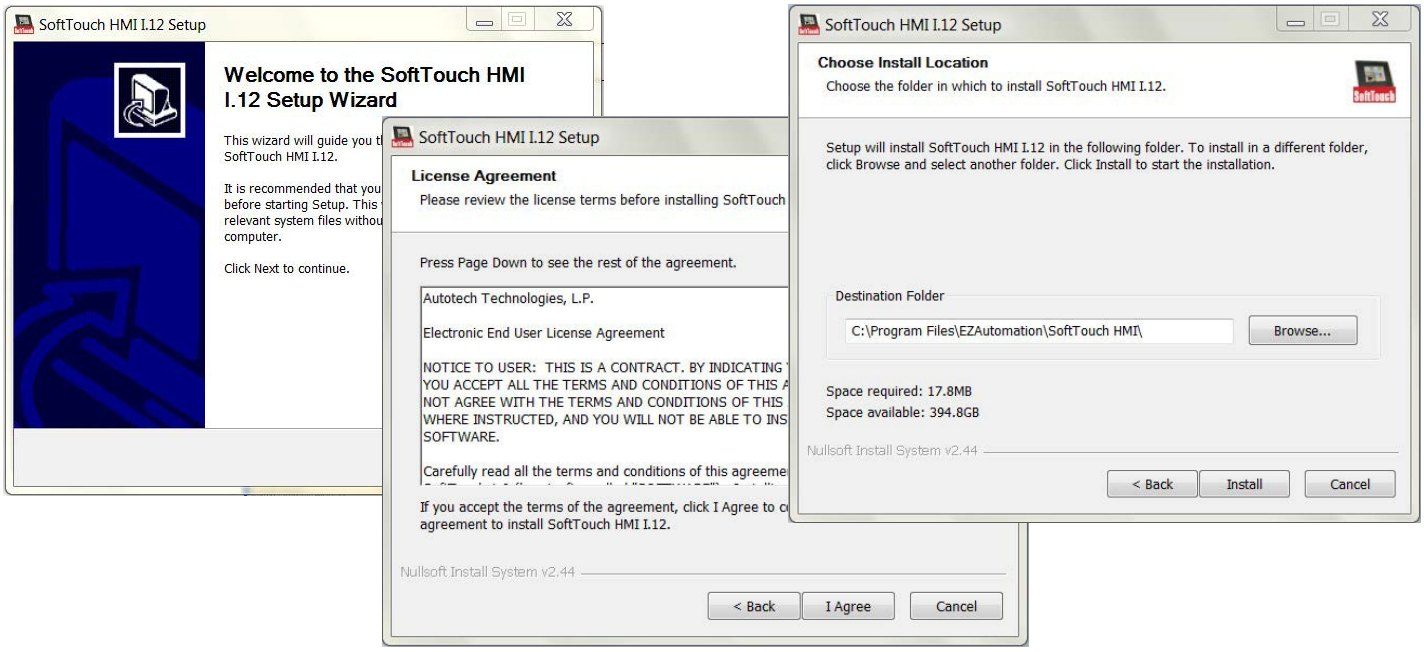
SoftTouch is compatible with EZSeries Touch panels in the sense that projects designed for EZ Series Touch Panels would run on SoftTouch. Some limits on PLC protocols supported (see p. 16 for details).

Requirements

A PC running Windows XP or Windows 7 operating system with 18 MB Space.
USB Port to plug in the license to run SOFT-HMI
EZSeries Touch Panel Editor Version 5.1.5 or higher is required for screen designs.

Installation

SoftTouch is distributed as a single install file. To install SoftTouch, run the installation file and follow on screen instructions.



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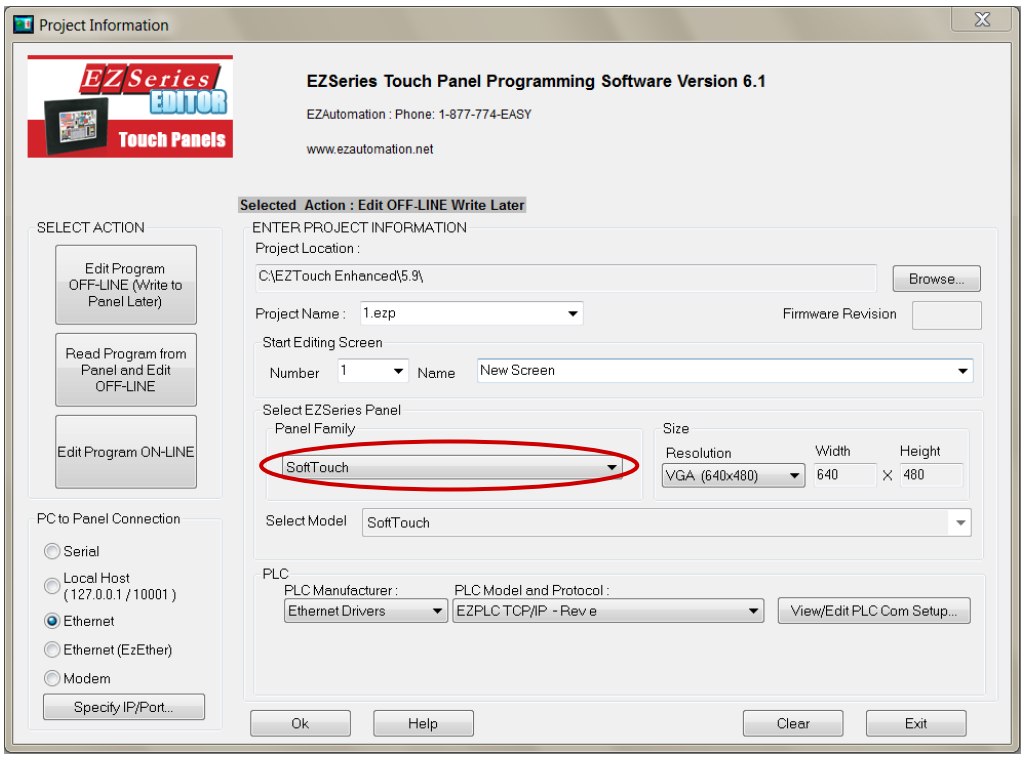
Designing Screens

EZSeries Touch Panel Editor version 5.1.3 or higher is required to design screens for SoftTouch HMI.

1. Launch the EZSeries Touch Panel Editor.
2. Click on the “Edit Offline...” button
2. Fill in the project name (change the Project location through *Browse* if necessary). If you want to use an already designed project, possibly for other EZ Panels, you may open that project.
   Note: It is recommended to make a backup copy of the original project prior to converting the Panel type to SoftTouch.
4. Select “SoftTouch” in the Panel Family group in the opening dialog box of the editor as shown below. Set the resolution (screen size).



5. Select appropriate PLC protocol, and set the communication parameters for the protocol selected.

Running the SoftTouch

Installation of SoftTouch places an icon on the desktop. Click the icon or run SoftTouch from Program menu.

After a brief appearance of splash screen, following dialog box appears:

Clicking this box will launch the Application Setup dialog box (see page 6 for details)

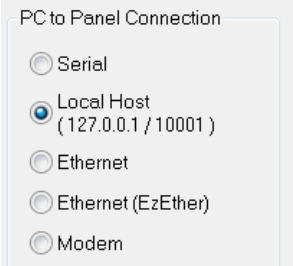
If above dialog box is not clicked, the application continues to load and brings up run-window as shown below indicating that there is no user project (screens) to display:

Now we need to “download” user project designed for the SoftTouch using EZ Series Touch Panel editor.

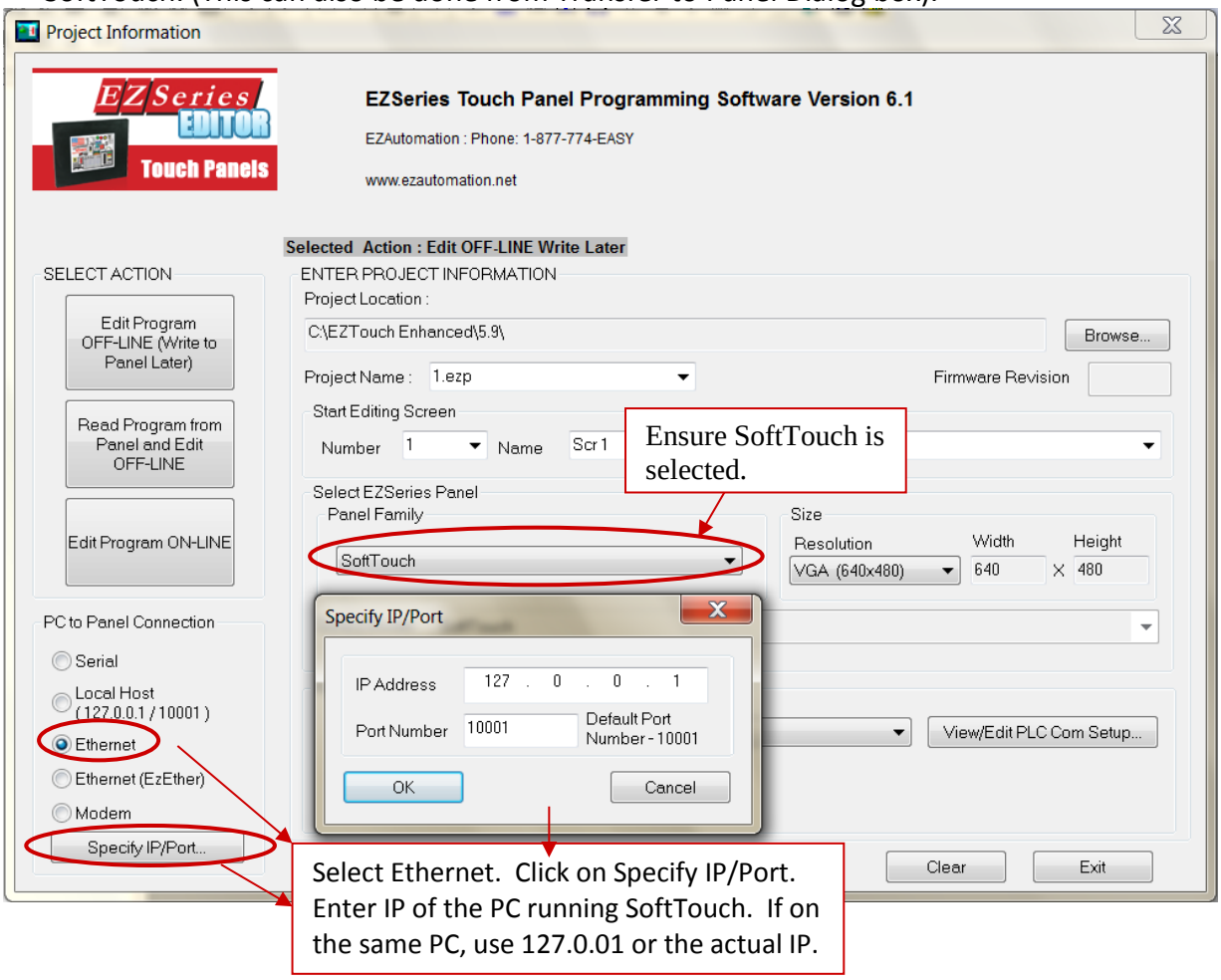
Transferring Project to SoftTouch

Once you have SoftTouch running, the next step is to transfer the project to the SoftTouch. Follow below given steps:

1. Launch EZSeries Touch Panel Editor.
2. Open your project. Make sure that the panel-family group has "SoftTouch" selected.
3. If the SoftTouch and EZPanel Editor are running on the same computer, then you can use local host address (127.0.0.1). Otherwise, select Ethernet as Panel to PC connection.

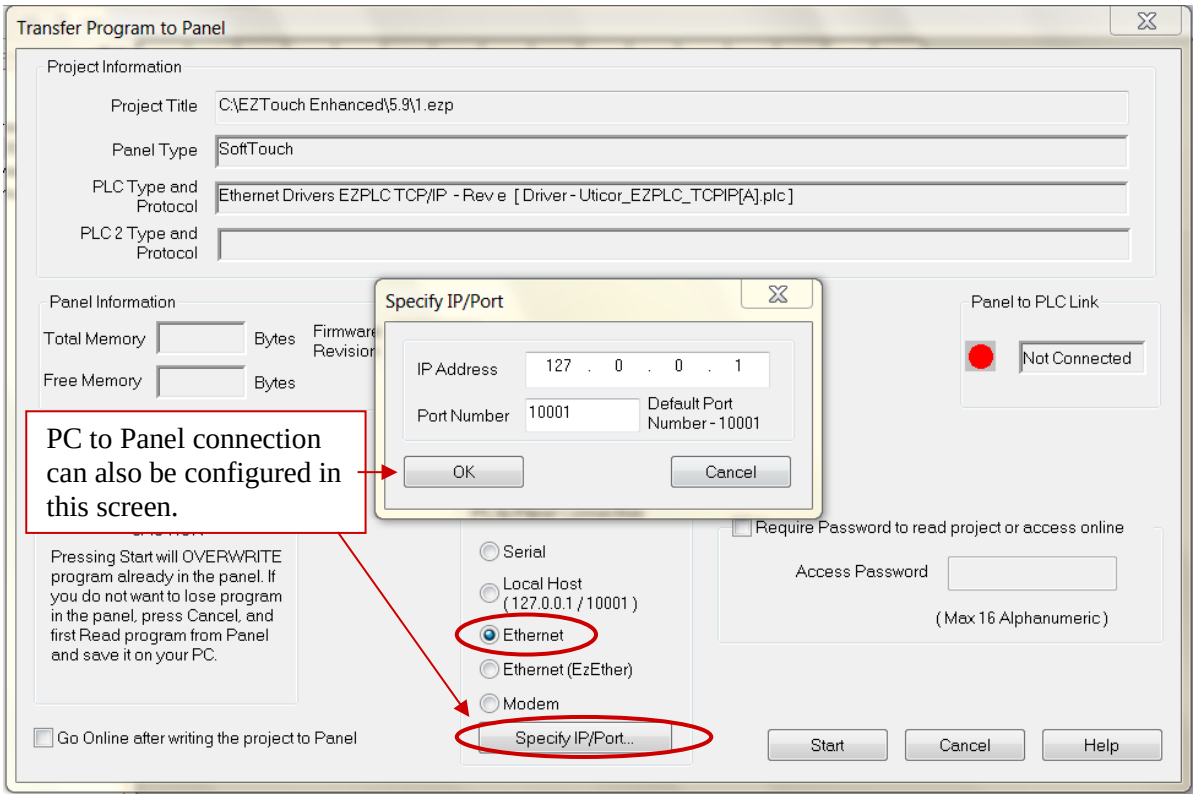


4. In the "Specify IP/Port" dialog box, enter the IP address of the PC running SoftTouch. If the SoftTouch and EZPanel Editors are running on the same computer, then you can type in the local host address (127.0.0.1); otherwise, enter the IP address of the PC running SoftTouch. (This can also be done from Transfer to Panel Dialog box).



5. Click OK to close the main dialog box

6. To transfer the project, select "File > Transfer to panel" menu and follow the instructions on the dialog box. You may select PC-Panel connection in this dialog box, and modify the IP address without going back to the opening dialog box. See below:



7. When ready to proceed, click Start to transfer the project.

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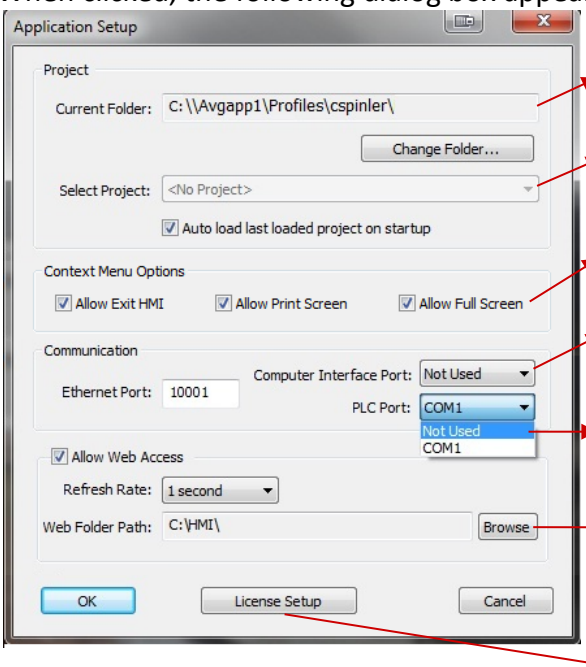
Configuring SoftTouch

Once you download a user project, the SoftTouch saves the downloaded project under the same name as that of the original project file, but with extension .img. For example, if your project was named Test.ezp, the SoftTouch would save the project as Test.img.

You can set up the SoftTouch so that it can load a project file automatically on application start up. To do so click on the "Loading SoftTouch ... " dialog box when you start the SoftTouch.

When clicked, the following dialog box appears:



Folder locations where all downloaded projects are saved. Click *Change Folder* to change the location the of project folder.

Select a project to run and/or select checkbox to automatically load last project upon start up.

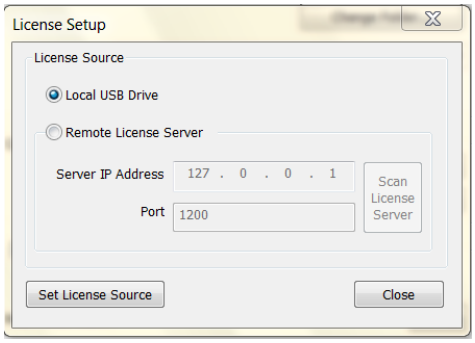
Select the menu options you want available during operation of SoftTouch. Deselect checkmark(s) to remove options.

Serial port that would be used for serial transfer of project (not necessary to specify if transferring project over Ethernet)

For serially connected PLC, select com port number (not necessary when using Ethernet connection to PLC)

For remote access of HMI screens (using EZRMC mobile apps or a browser), check "Allow Web access." Select refresh rate and specify web folder path. This path MUST be the same as physical path of the webserver setup on this computer.

Click *License Setup* to setup source of license:



Local USB Drive – Select if license located on inserted USB drive.

Remote License Server – Select if license accessible over the LAN Network. Enter target IP Address and Port, then click *Scan License Server.*

To load a new project to SoftTouch, simply download the new project from the EZTouchpanel editor.

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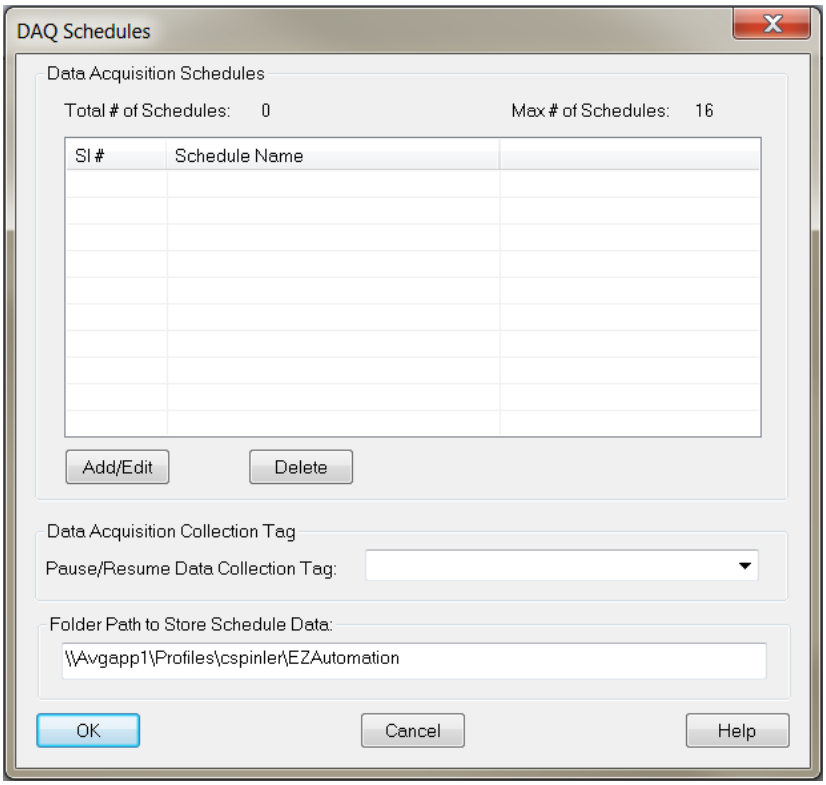
Data Logging Overview

Through our EZ Series Editor Software, users can establish time based or event based schedules for data acquisition. For instance, data can be collected every 10 seconds or at a specific time such as 9 AM. Alternatively, data collection can be activated when a certain event or condition occurs.

The user can define up to 16 schedules as long as each schedule is unique. (For example, there cannot be two identical schedules set to collecting data every 30 seconds.) User can also associate a name (up to 8 characters) with each schedule. Each schedule can currently be used to collect data for up to 32 tags.

DAQ Schedules

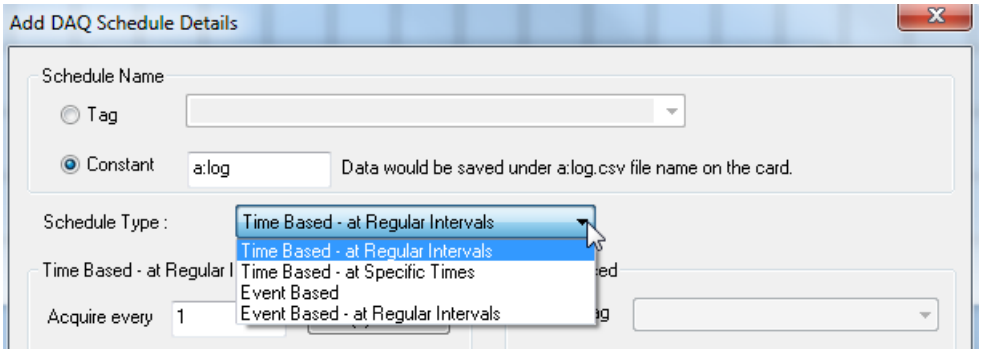


Add / Edit:
Use this button to add a data acquisition schedule or highlight an existing schedule and then press the button to edit it. Additional information on adding schedules and schedule types is available in the sections that follow.

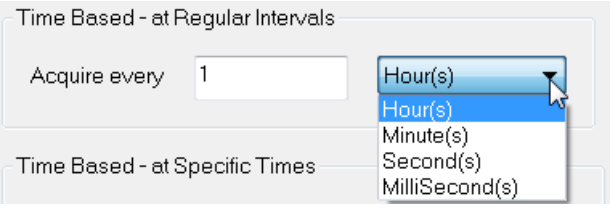
Delete:
Highlight an existing schedule, then press this button to delete it.

Pause / Resume Data Collection Tag:
This is a discrete tag that can be controlled by user (e.g. through a Push Button) or by PLC to enable or disable data acquisition. When the tag's value is 0, data collection is enabled; when it is 1, the collection is disabled or paused. Setting the tag to 0 resumes the data collection.

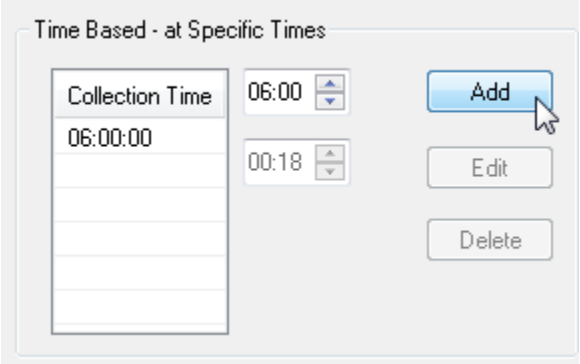
Types of Schedules



1. **Time based – at regular Intervals**
   Allows you to store the tag value at regular time intervals, anywhere from every millisecond to every 1000 hours.

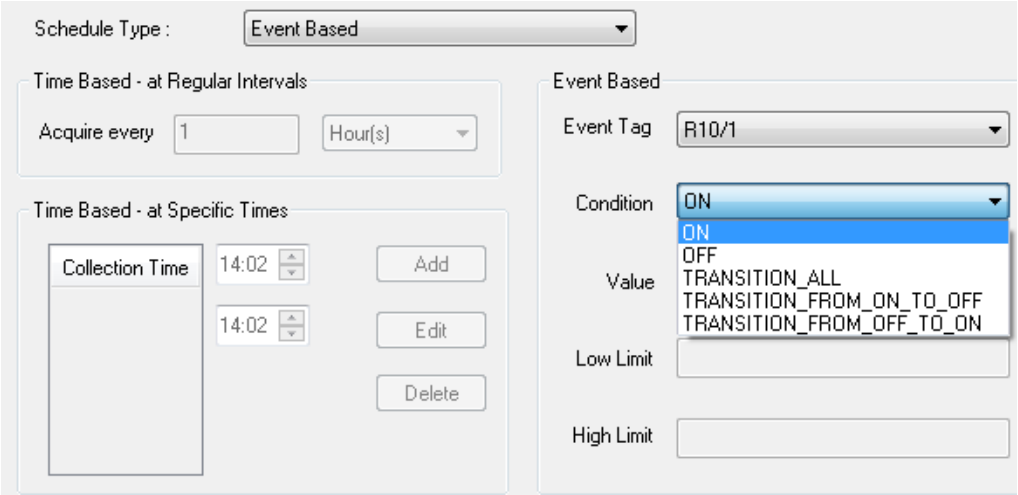


2. **Time based – at Specific Times**
   Allows you to store the value of a group of tags up to 10 specific times. You may always edit / delete a specified time.

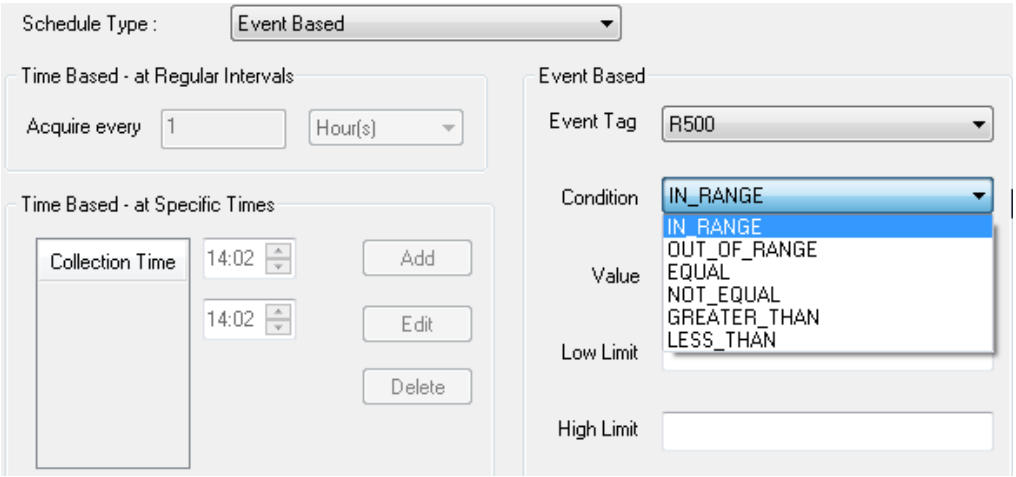


3. **Event Based:**
   Allows you to create an event and store the values of a group of tags on the occurrence of the same. Based on the data type of the event tag, schedule can be either Discrete Event Type or Numeric Event Type.

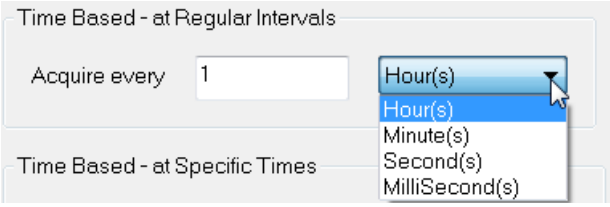
Discrete Type Event:



Numeric Type event:

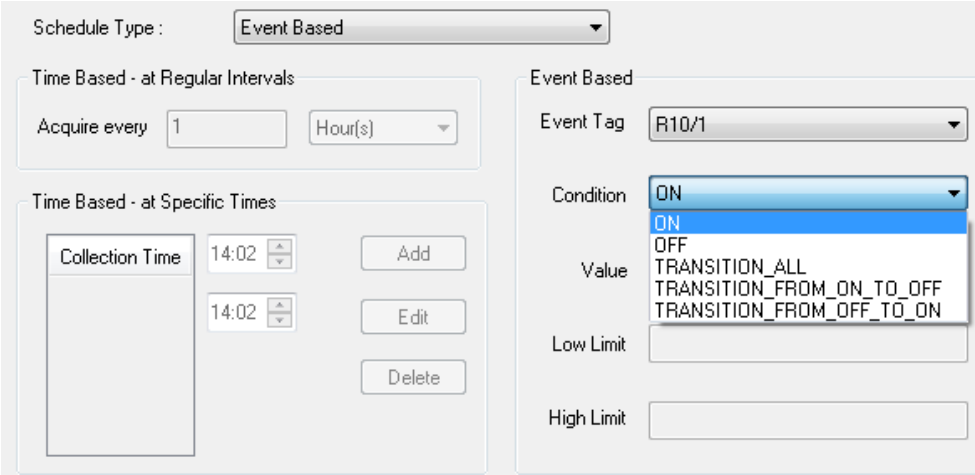


4. **Event Based - at Regular Intervals:**
   Allows you to create an event and store the values of a group of tags on the occurrence of the same during a set time period. Based on the data type of the event tag, schedule can be either Discrete Event Type or Numeric Event Type.
   a. Set how frequently the data is stored through the Time Based interval, anywhere from every millisecond to every 1000 hours.

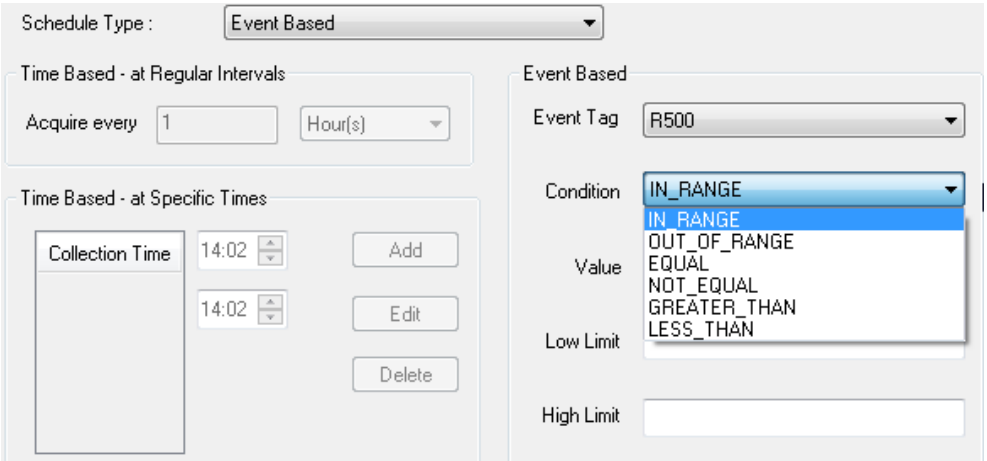


   b. Select either a Discrete Type Event or a Numeric Event Type.

Discrete Type Event:

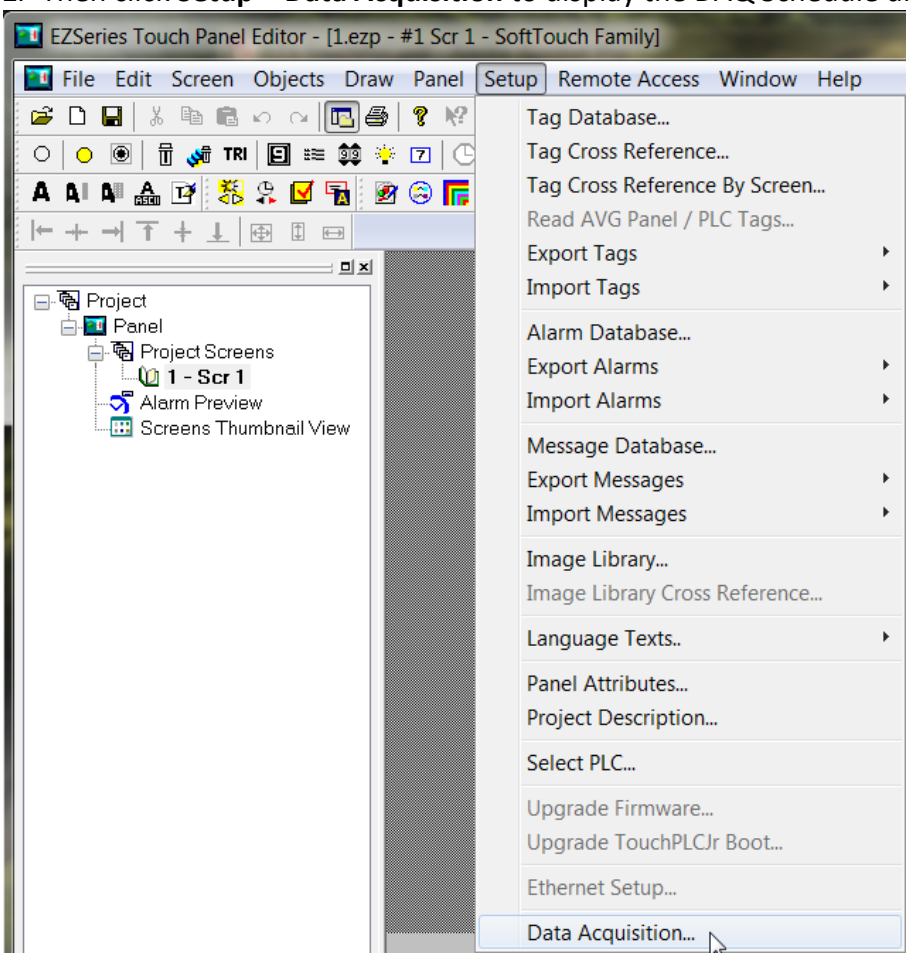


Numeric Type event:



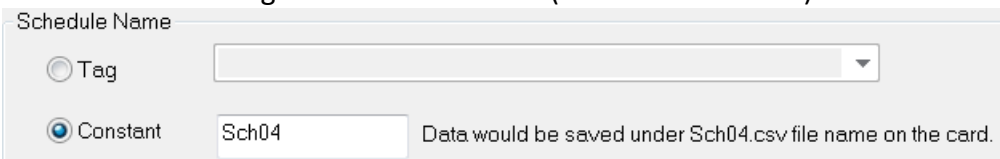
Adding a Schedule

1. Open your project file for the SoftTouch using the EZ Series Software.
2. Then click **Setup** > **Data Acquisition** to display the DAQ Schedule dialog.

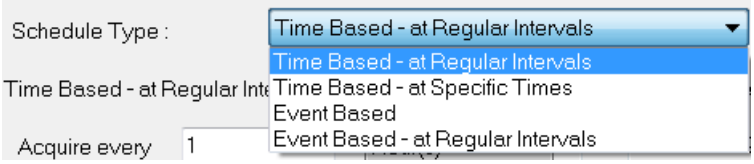


3. The Data Acquisition dialog box will appear which allows you to add new schedules or edit/delete existing ones. Click on Add/Edit button to display the "Add DAQ Schedule Details."

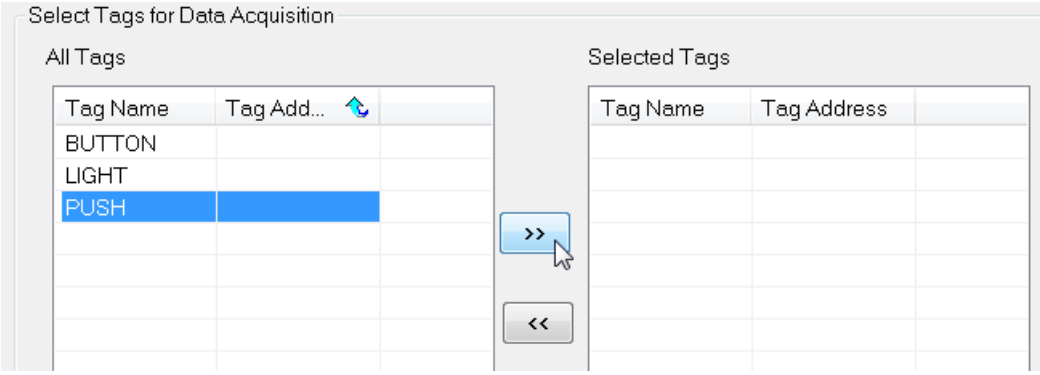
4. The "Add DAQ Schedule Details" box will appear. Enter a schedule name. Schedule Names can either be Tag based or a Constant (user defined name).



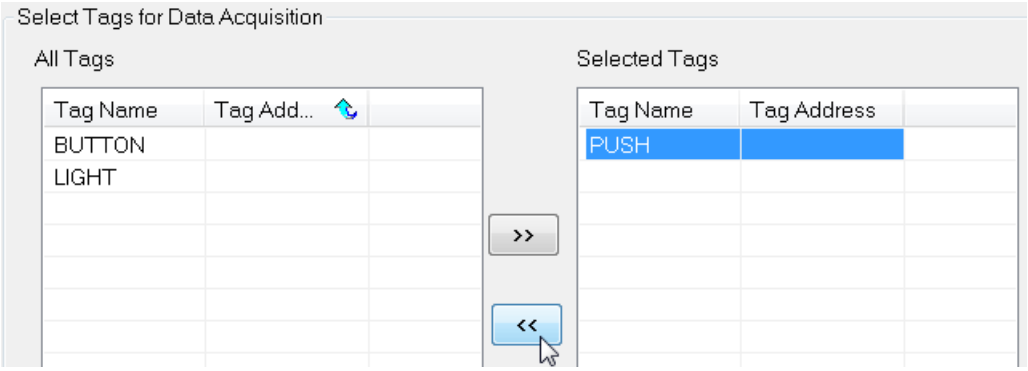
5. Select preferred Schedule Type (options displayed below):



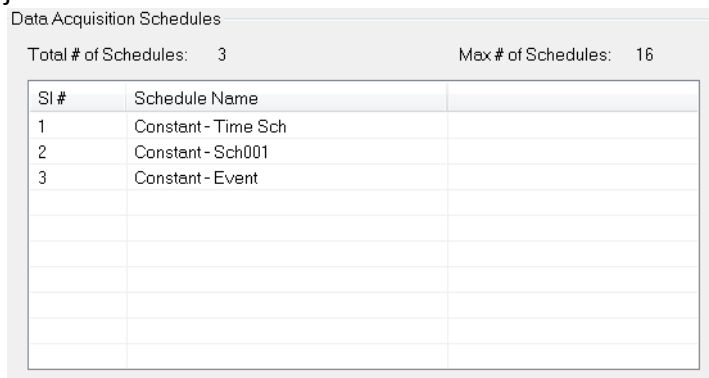
6. Under "Select Tags for Data Acquisition," the selection displays all the tags defined in the panel with their corresponding tag addresses. Use the double arrows to select or deselect tags within the schedule. Maximum tags allowed per schedule is 32.
   - To select a tag for data acquisition, click on it and then press the >> button. **Note**: Tags can also be selected or deselected by double-clicking on them.



   - To deselect a tag for data acquisition, select it again and press the << button. **Note**: Tags can also be selected or deselected by double-clicking on them.



7. Click "Add" when finished making selections. Then click "Close" to return to the main DAQ Schedules dialog box.
8. The added schedules will now be listed. Schedules are saved along with the user project.



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Remote Monitoring & Control

With the introduction of ***Remote Monitor & Control (RMC)*** our EZ Series Software in connection with SoftTouch provides a unique set of remote capabilities. A user can remotely log on to a unit and monitor any of the panel screens with live data including the currently displayed screen.

With the right access permissions and authentication, a user can remotely "touch" the objects on the panel, to control a machine/plant effectively. Remote control feature can be invaluable for remote diagnostics, unmanned operations, or supervisory monitoring.

In addition to remote monitoring and control, user may also program the panels remotely over Ethernet, allowing OEMs to remotely upgrade the screen programs within the panels.

To setup Remote Monitoring and Control, follow these steps:

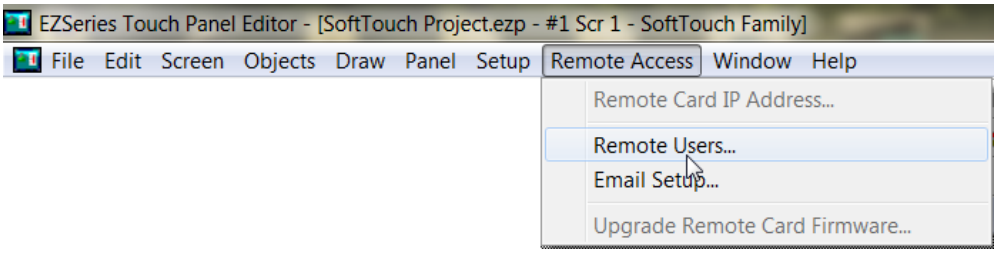
1. Use EZ Series editor to set up IP address of the panel.
2. Use EZ Series editor to set up remote users and authentication level.
3. Use RMC (Remote Monitoring & Control) software to connect to the panel remotely.

Setting up Remote Users

The EZ-RMC Software can be used with or without defining authorized users. Without defining remote users, anyone can connect and view the panel screen using EZ-RMC Software. However, they would NOT be able to make any changes to the panel. ***It is highly recommended that you define authorized users for remote access***.

Remote users can be given View ONLY or Operation (View + Control) permission. View only permission allows user to ONLY monitor the panel display remotely, while operation permission allows a user to operate panel remotely.

Select **Remote Access > Remote Users** as shown below to display the following EZ-RMC User Dialog window:



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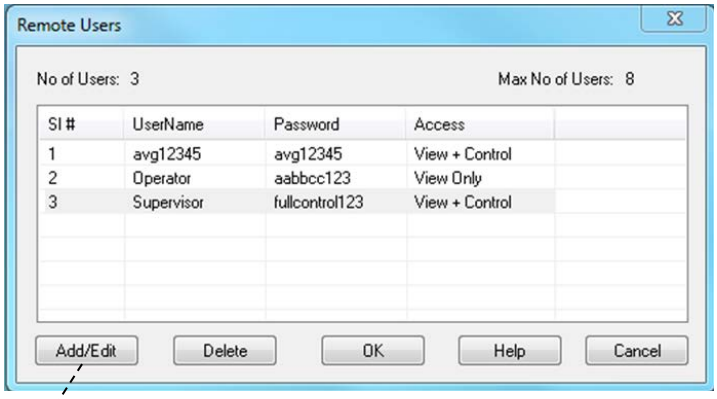
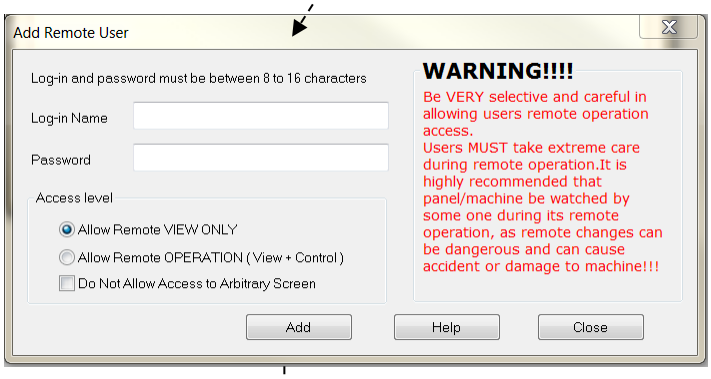


Use this screen to add up to 8 remote users through the *Add/Edit* button or delete existing users using the *Delete* button

Click *Add/Edit* to add a remote user

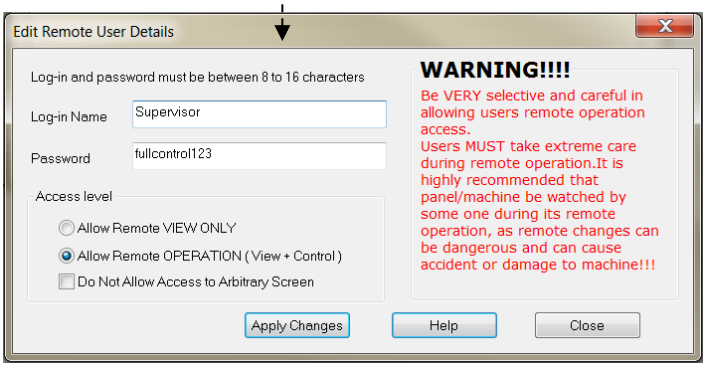


Add Remote User

The Log-in name and the password are case sensitive and both must be between 8 to 16 characters in length. Password must contain at least one letter and one number.

Access Level can be set for remote viewing only or for viewing and control (details below).

OR highlight existing user then click *Add/Edit* to edit user details



Edit User Details

Under Edit Mode, you can make changes to the log-in name, password or access level granted.

When finished, click *Apply Changes* for the new details to take effect.

Access Level

ONLY Remote VIEW - A user can remotely log on to the panel and monitor any of the panel screens with live data including the currently displayed screen.

Remote OPERATION - A user can remotely log on to the panel and monitor any of the panel screens with live data including the currently displayed screen as well as can remotely "touch" the objects on the panel, to effectively operate or control a machine/plant.

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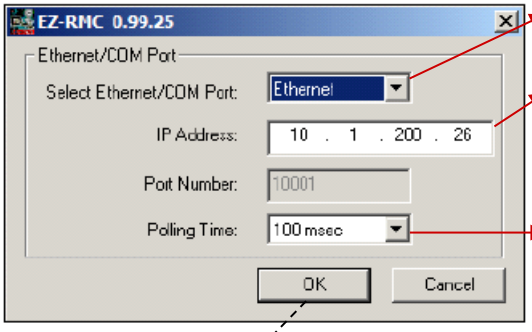
Run RMC Software

To access the panel over Ethernet, you need to install and run the EZ-RMC software on your PC. Once you run the software, you will see the following EZ-RMC dialog.



Select either Ethernet or desired COM Port.

(Ethernet option only) Lists the IP Address of the RMC Card you established earlier.

Polling time determines how often the RMC software reads data from the panel. A lower polling time may impact the performance of the panel. It is recommended to keep polling time as high as possible.

For projects with Access Password

Access Password

This screen only appears for projects that are password protected. This project level password is set during screen design under **Setup > Panel Attribute > General Tab**. You must enter a correct Access Password in order to communicate with the panel.

For projects with remote users listed

Authenticate User

Clicking OK will prompt you to provide the established user name and password.

Note: User names and passwords are case sensitive**.**

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PLC Protocols Supported

PLC Manufacturer	Serial Drivers	Ethernet Drivers
AVG/EZAutomation	EZPLC	EZPLC TCP/IP
Allen Bradley	DH485/AIC/AIC+ DF1 Half Duplex DF1 Full Duplex	Ethernet/IP
KOYO (AutomationDirect)	ADC K-Sequence Do More Serial	DirectLogic ECOM Do More Ethernet
Modicon	Modbus RTU	Modbus TCP/IP
GE		GE SRTP
Siemens		Siemens ISO Ethernet