Shimaden Lite

The Shimaden Lite Software is a software package to allow users to quickly and easily setup, monitor and change values in the Shimaden controllers with communications option fitted.

Features:

- Shimaden Wizard to find controllers on the Serial Port.
- Simple navigation method to view controllers.
- Group View to view up to six controllers at once.
- CSV Report generation for viewing data in Excel
- Alert window for showing status of controller events.
- Toolbar for changing controller parameters
- “Controller Like” display and short time interval trend graph.
- Access control to prevent changes to controllers, program setups and closing program.
- Supports RS485 controllers: SR80, SR90, FP93, SD16, MR13, SR70, SR50, SD20.
- Supports RS422 controllers: SR25, SR253, FP21, SR50, SR70, SD20.
- Runs on Windows 95,98,Me, 2000 and XP.

Installing the software

Install the Software using the supplied CD ROM.

Running the software

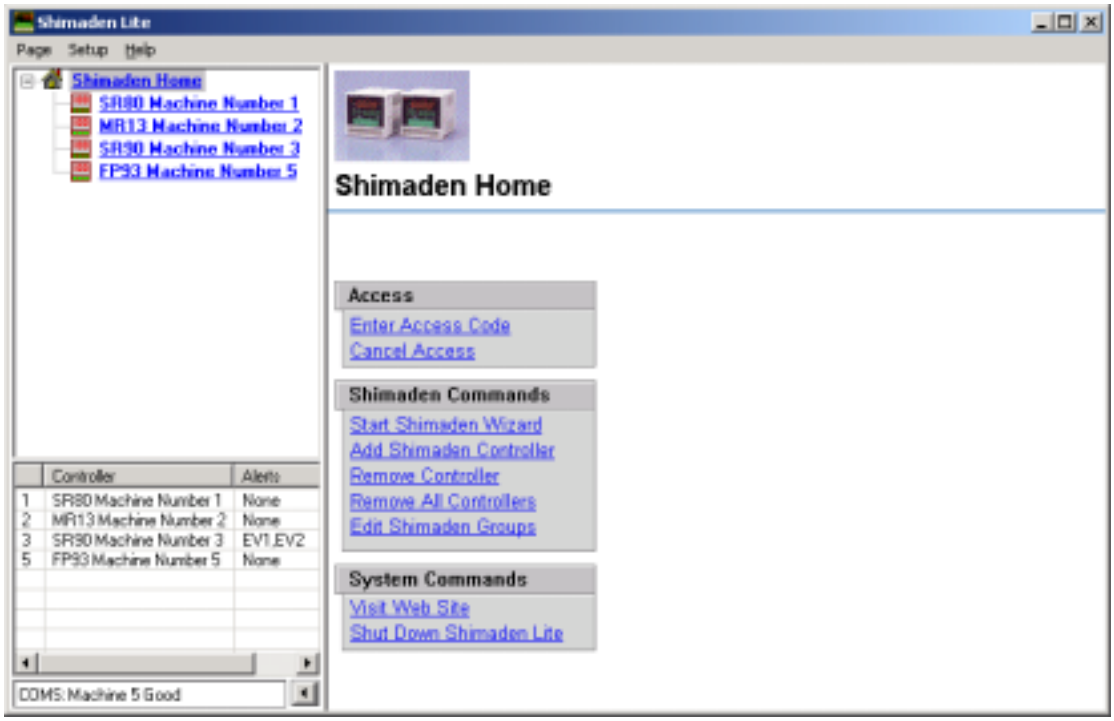
Use a link on the desktop to Shimaden.exe to start the Shimaden Lite software.
Use a link on the desktop to Shimaden Lite.pdf to read this help file.

When the software is first started, the Shimaden Wizard will start, which can be used to search for the controllers on the computers serial port.

Disclaimer:

Shimaden accepts no responsibility for damage or losses from software or hardware supplied.

Shimaden Lite Main Window



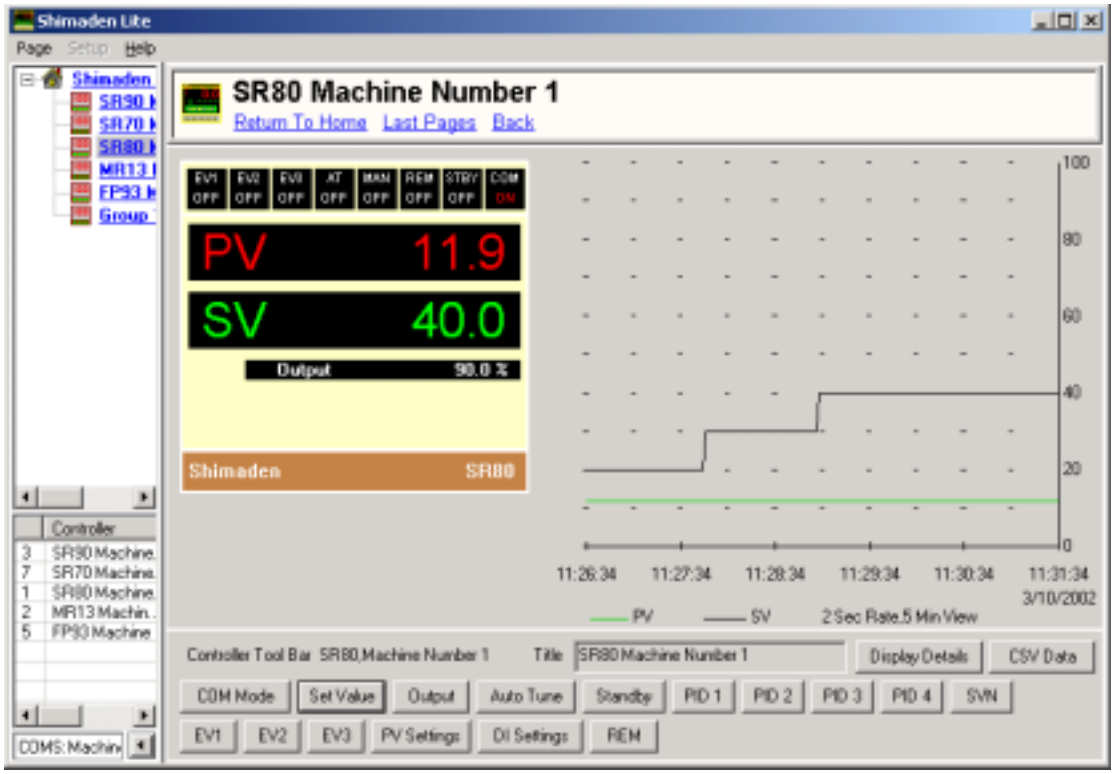
Viewing Areas:
The Navigation Tree is shown on the Left of the Window, click on a controller name to view that controller.
The Links on the Home page are used to setup various parts of the software.

Access:
Click “Enter Access Code” to enter an access code.
Click “Cancel Access” to cancel an access code.

Shimaden Commands:
Click “Start Shimaden Wizard” to find the controllers.
Click “Add Shimaden Controller” to add a controller manually.
Click “Remove Controller” to remove a controller.
Click “Remove All Controllers” to remove all controllers.
Click “Edit Shimaden Groups” to setup the Shimaden group display.

System Commands:
Click “Visit Web Site” to visit www.intech.co.nz, for support of this program.
Click “Shut Down Shimaden Lite” to close the program.

Controller Display



The controller is shown along with the graph showing recent values of PV and SV of the controller.

The tool bar at the bottom is used to access and write data into the controller.
Click Return to Home to return to the Home page, Last Pages to view a list of the 10 last visited pages, or Back to move 1 step back to the last screen shown.

The toolbar display is different for each controller type. The controller must be put into the COM Mode to read data out and write data to the controller. “COM” shows ON in RED at the top of the controller display when the controller is in the COM mode.

WARNING: Changes to controller setups should only be done by authorized personnel as they will effect the process that the controller is controlling.

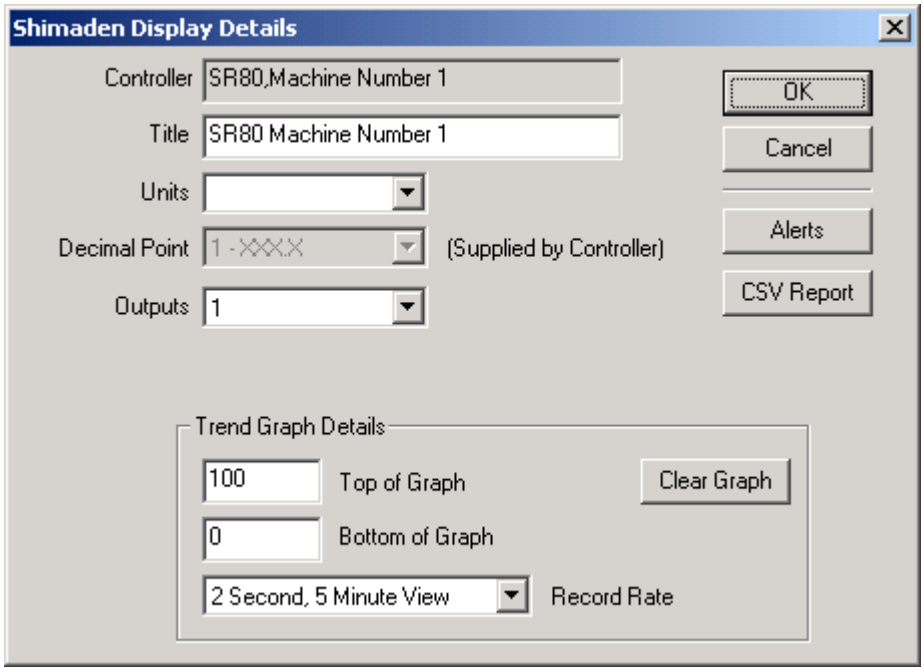
The Controller cannot be put into COM mode via the front panel of the controller. It can only be done via the COM Mode button on the tool bar (except: FP21 which is put into COM mode via the front panel).

Use Display Details to change the trend graph Y axis and setup the alerts and CSV report for the controller.

Click CSV Data to open the CSV data report folder.

Display Details

This dialog box is used to set the trend graph, Alert Messages and CSV Reports.



Title is the controller name, shown in the Navigation Tree.
Units is displayed next to the controllers PV,SV on the controller view.
Decimal Point, this is set by the software reading the range out of the controller.
Outputs. This can be set on SR80 and SR90, but is read out of the controller for other controllers.

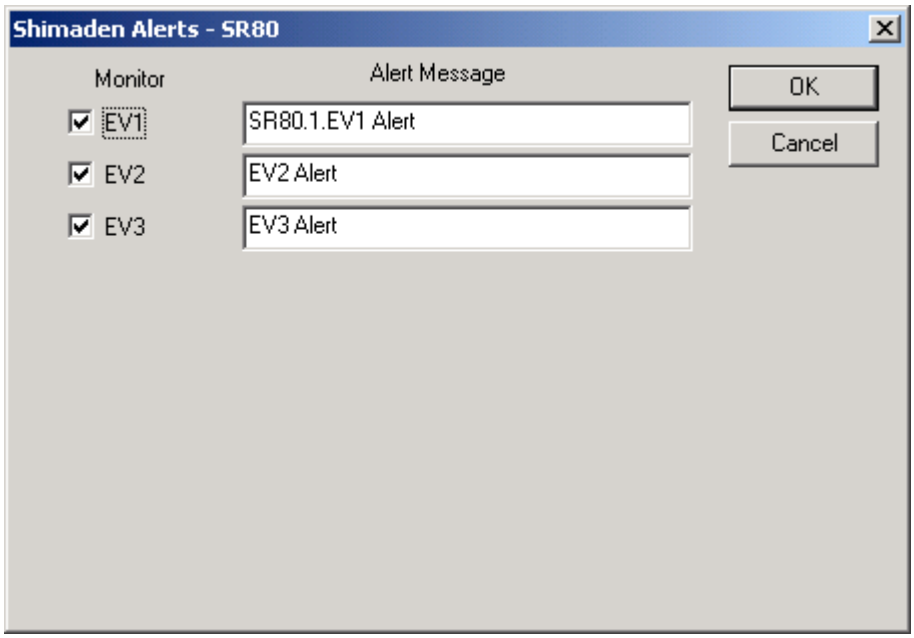
The Trend graph details are set here. You can set the Top and Bottom of graph and the recording rate 2 sec, 15 sec and 60 sec per sample. This trend graph is a short term view only of the controllers current activity. Use the CSV report generator for saving the data for future analysis. The 2 sec rate gives a 5 Minute View of Data, the 15 sec rate gives a 1 Hour View of Data, the 60 sec rate gives a 4 Hour View of Data .
When the rate is changed, the user will be prompted and the previous data will be cleared.

A red vertical dotted line indicates on the graph when the software has been restarted. The trend graph is started when the controller is first displayed on the screen, as data builds up, the trace will move across the screen with the most recent time on the right.

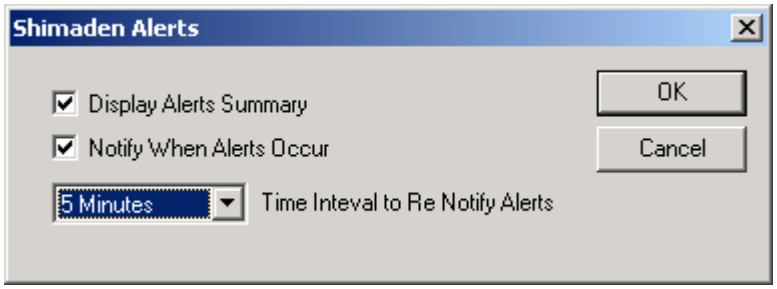
Click Alerts to setup the Alerts messages for the Alert Notify window.
Click CSV Report to setup the CSV file options.

Alert Messages

The Alert Messages are shown in the Alert Notify window as the events occur on the controller. They are displayed in the Alert summary window at bottom left of the main display, but these messages can be used to display a more meaningful message when the event occurs. The Alert Notify can be closed by the user, but it will be displayed again after a set time if the alert hasn't been cleared at the controller.



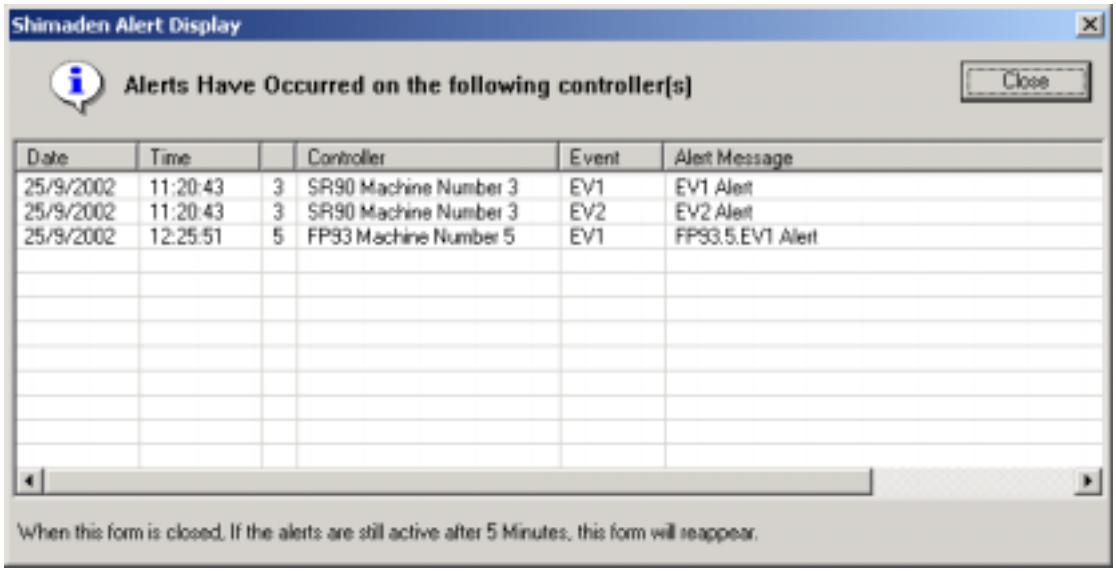
The Alert notify is setup on the Home Page, using Setup, Shimaden Alerts.



Click "Display Alerts Summary" to show the alerts at the bottom left of Shimaden Lite Window.
Click "Notify When Alerts Occur" to display the notification window.

Click OK to save changes.

Shimaden Alert Display

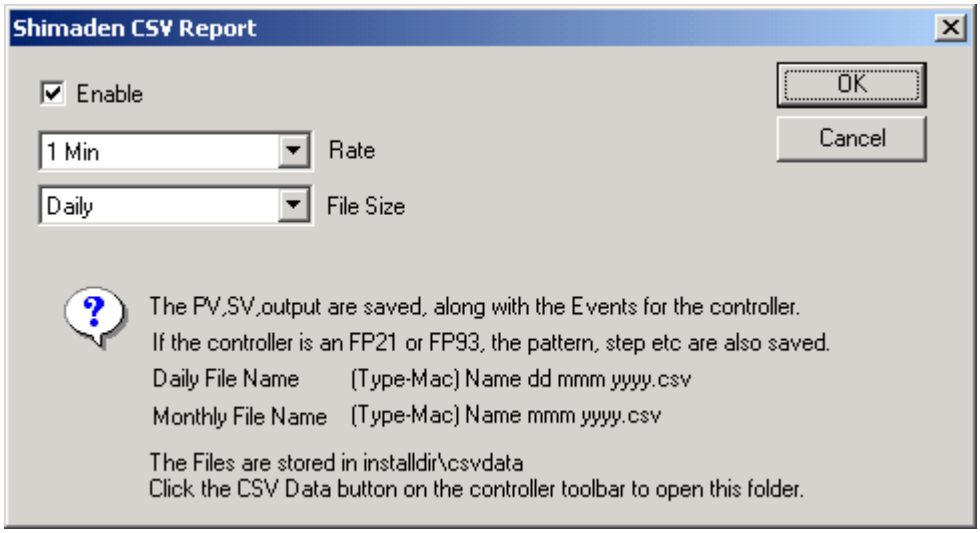


The Alert display shows the Alerts in order of Machine Number and gives the date and time when the alert first occurred. When the dialog is closed, it will reappear after the set time interval if the alert is still active. If another alert occurs, the dialog will be displayed again as that new alert is found.

The alerts are scanned one controller per second. Therefore if 10 controllers are used, it will take up to 10 seconds before the alert is found and displayed.

CSV Reports

The CSV Reports are used to save the controllers data to a CSV file. The data is fixed at that which is scanned for the PV, SV and output and the events, a file size and record rate can be chosen for the file. Data is saved to installdir\csvdata.



Click Enable the enable CSV Report.
Chose the recording rate from Fast, 1 Min … 60 Min per entry. Fast means every time the data is scanned from the controller, it will be saved.
Chose the File Size, either Daily or Monthly.

The file is saved as follows, with a header as the first line.
Date,Time,PV,SV…..EV1,EV2
Then data for each record saved.

Data Saved for each controller

SR70	PV, SV, Output	AL, AH
SD16	PV, AL1, AL2	AL1, AL2
SD20	PV, AL1, AL2	AL1, AL2
SR80	PV, SV, Output1,Output1	EV1, EV2, EV3
SR50	PV, SV, Output	EV1, EV2, EV3
SR25	PV, SV, SVn, Output1, Output 2	EV1, EV2, EV3, DO1, DO2
SR253	PV, SV, SVn, Output1, Output 2	EV1, EV2, EV3, DO1, DO2, DO3, DO4, DO5
SR90	PV, Sv, Output 1, Output 2	EV1, EV2
FP21	PV,SV,Out, Pattern,Step,Time	AL1, AL2
MR13	PV1, SV1, Out1, PV2, SV2, Out2, PV3, SV3, Out3	EV1, EV2, EV3
FP93	PV, SV, Output, Status, Pattern Step, Time Left	EV1, EV2, EV3

Shimaden Groups

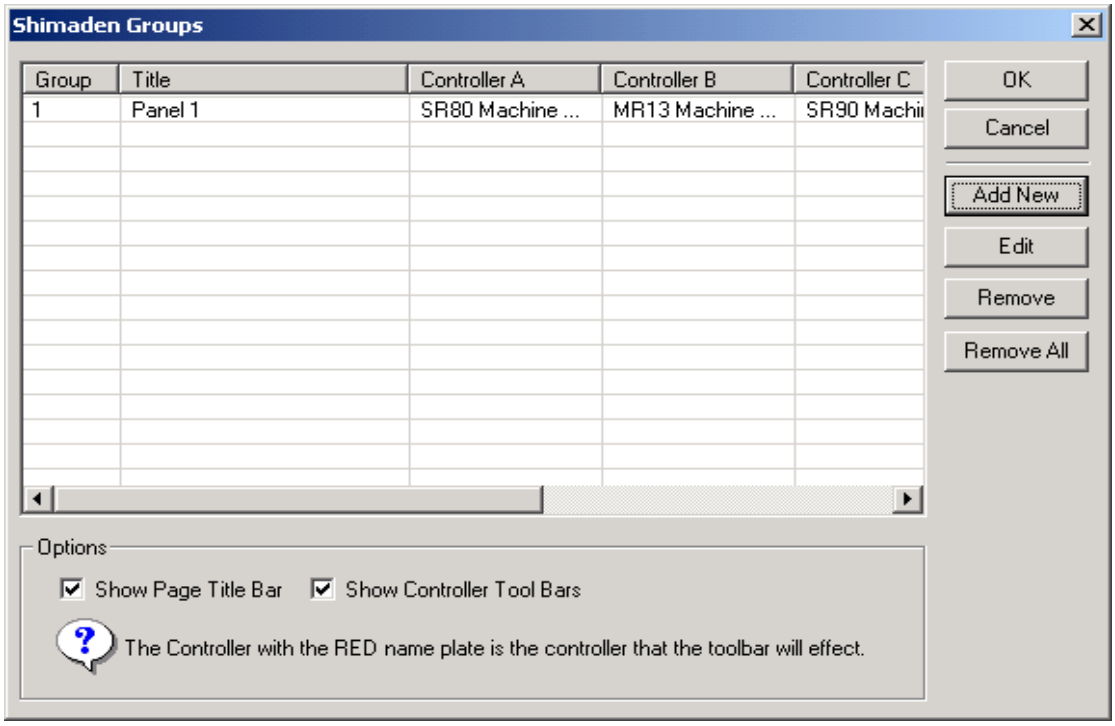
Shimaden Groups are used to display up to six controllers on the screen at one time. Up to 100 groups can be setup. Each controller is shown with a Name Plate which is RED to indicate the controller is attached to the toolbar at the bottom of the screen.

Shimaden Group Display

Click on the controller display to make it the active controller.
Click on the graph symbol (to the right of the name plate) to go the single view of the controller with the trend display.

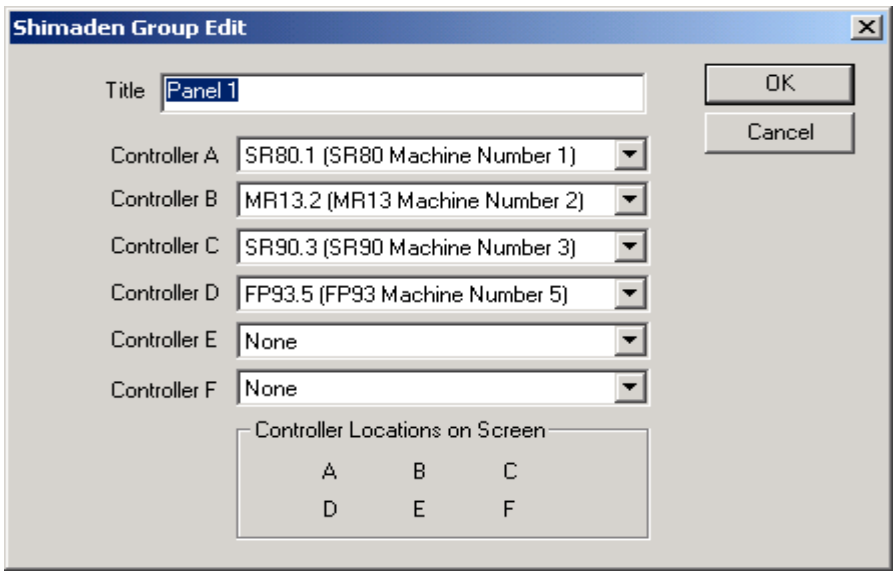
Shimaden Group Setup

Check “Edit Shimaden Groups” on the Shimaden Home page.



Click Add New to add a new group.
Click a group and then click Edit to edit it.
Click a group and then click Remove to remove it.
Click “Remove All” to remove all groups.

Add/ Edit A Group

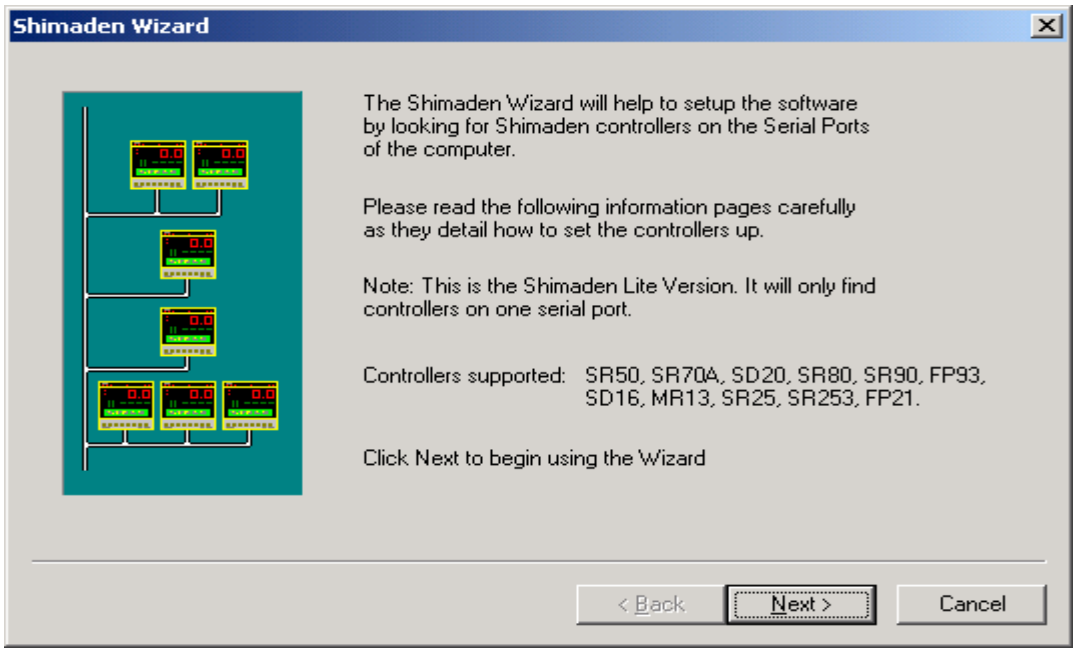


Choose a controller for controllers A to F and a name for the group of controllers.
Click OK to enter the changes.

Shimaden Wizard

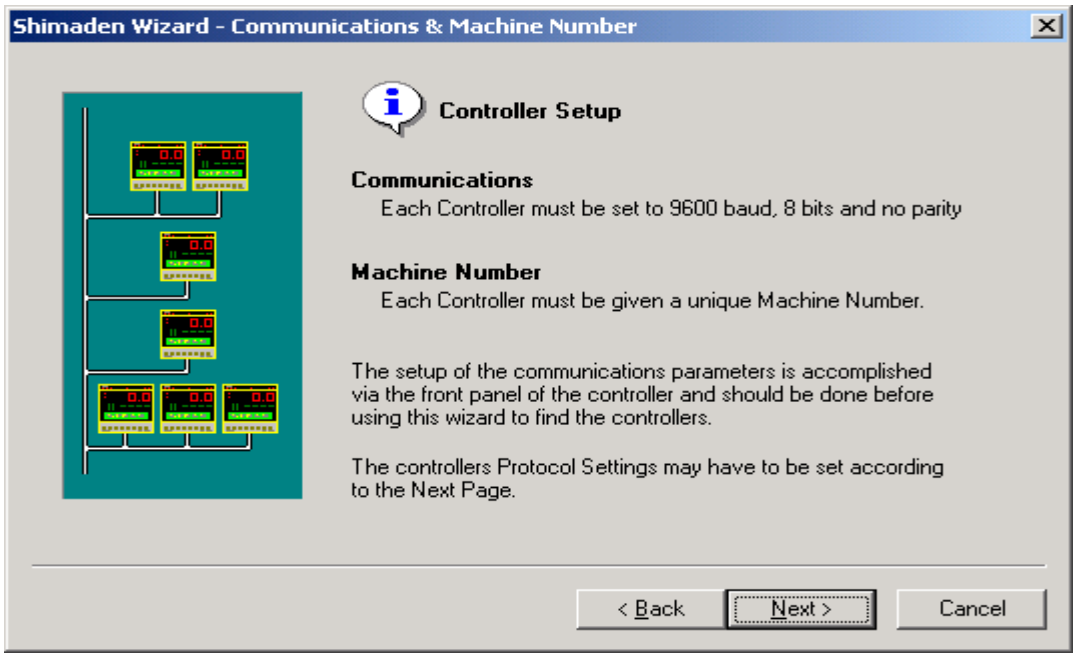
The Shimaden Wizard is used to find the controllers on the serial port.
The controllers must be setup before using the wizard to find them. Setup the comms details as shown and give each controller a unique machine number.

Step 1:



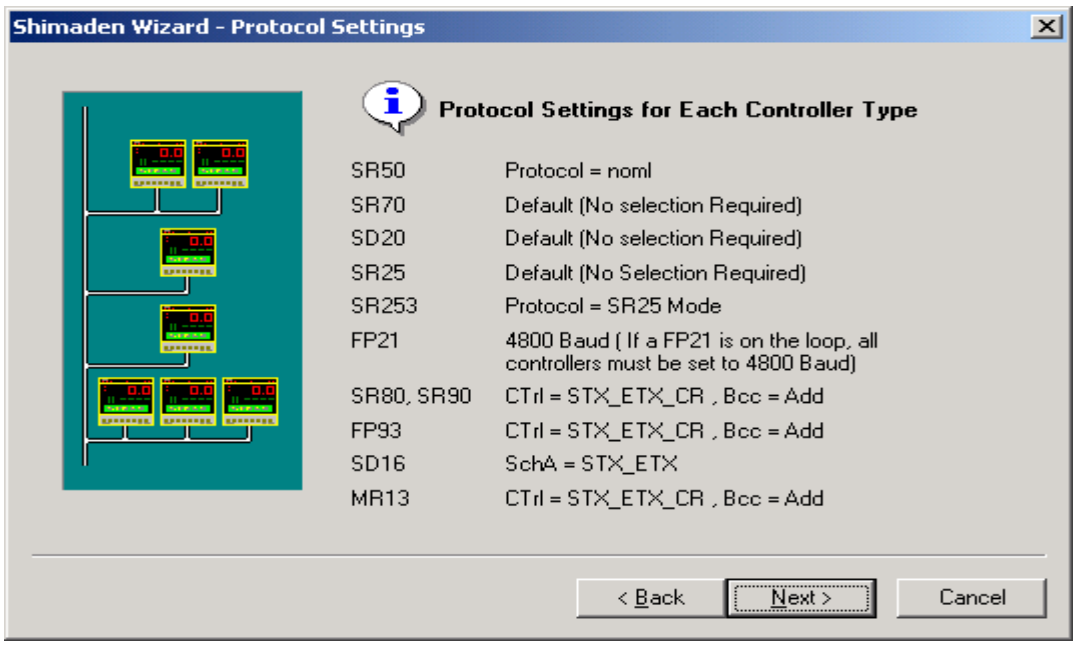
Click Next

Step 2:



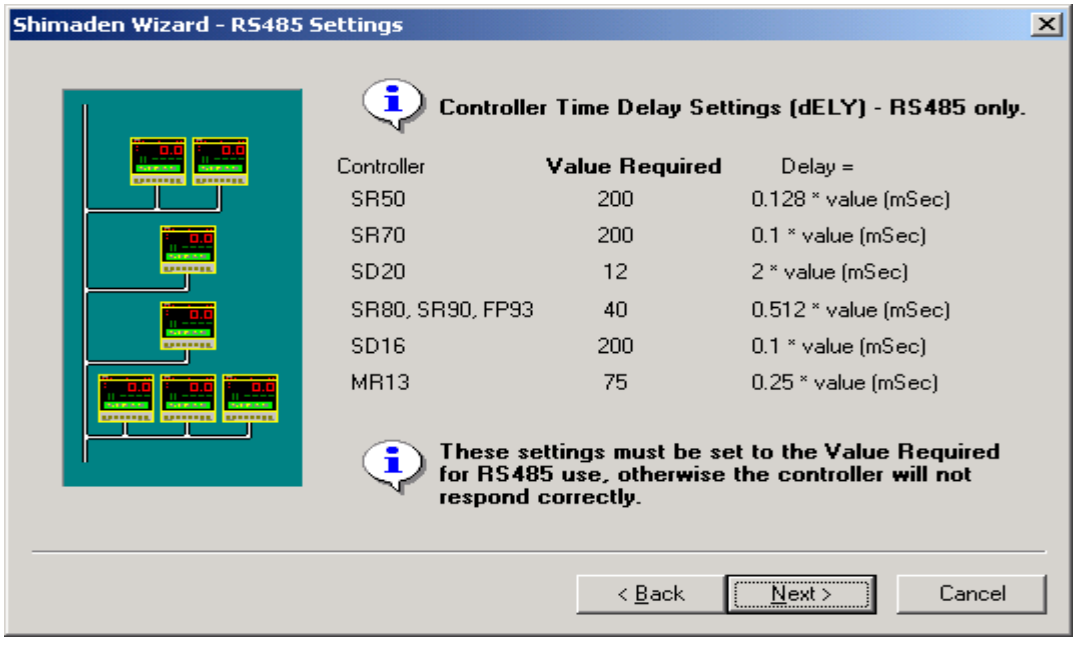
Click Next.

Step 3:



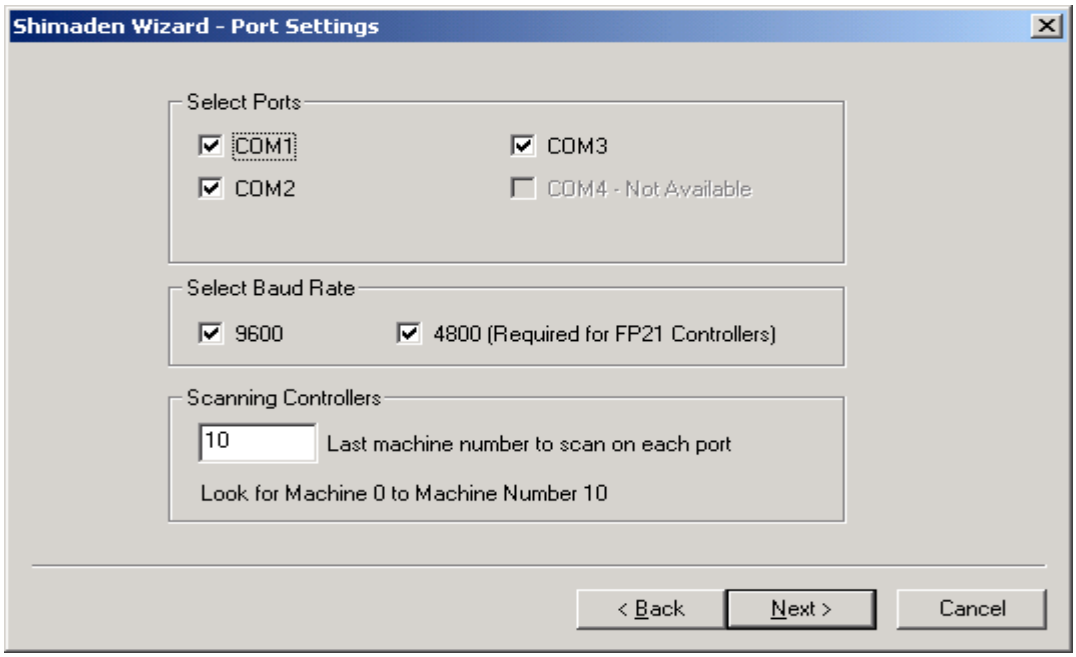
Click Next

Step 4:



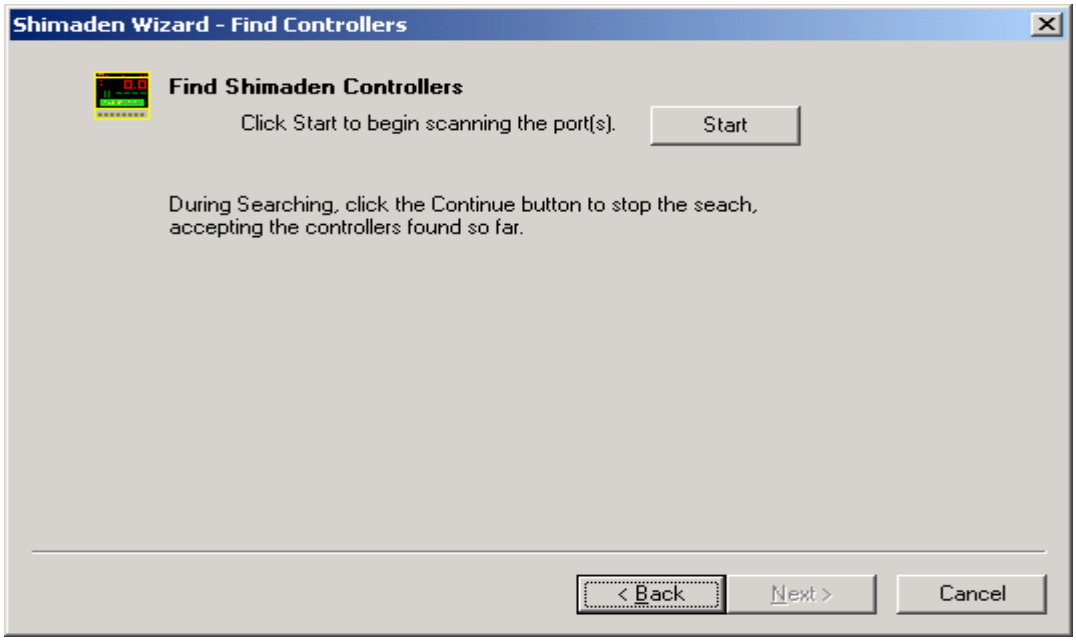
Click Next

Step 5:



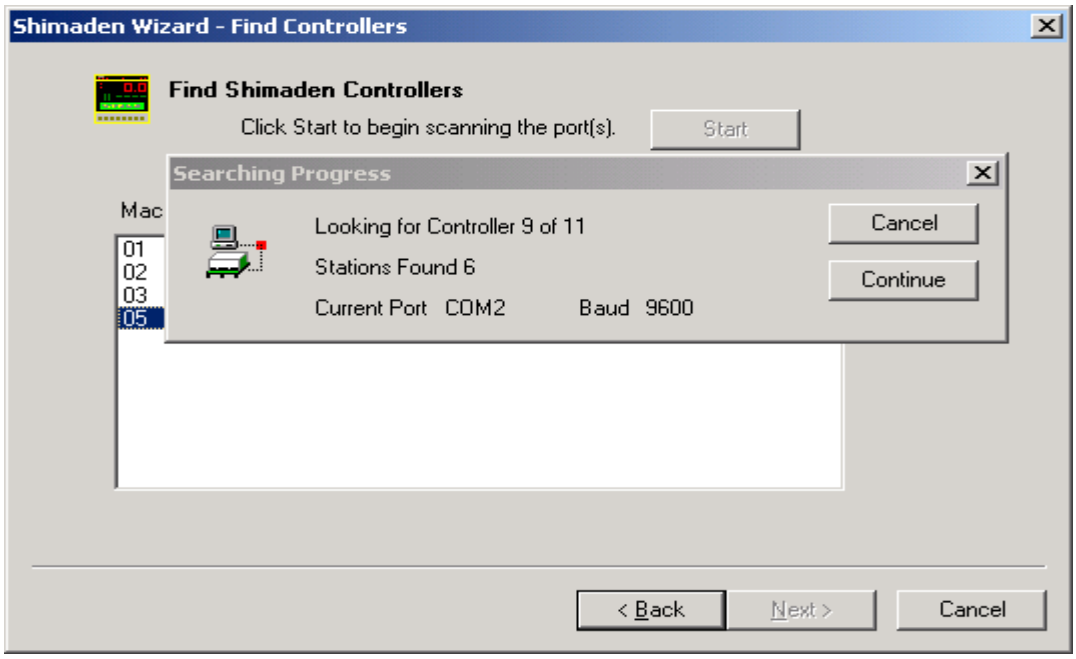
Select the ports to scan, the Baud rate and the number of controllers to look for. Click Next.

Step 6:

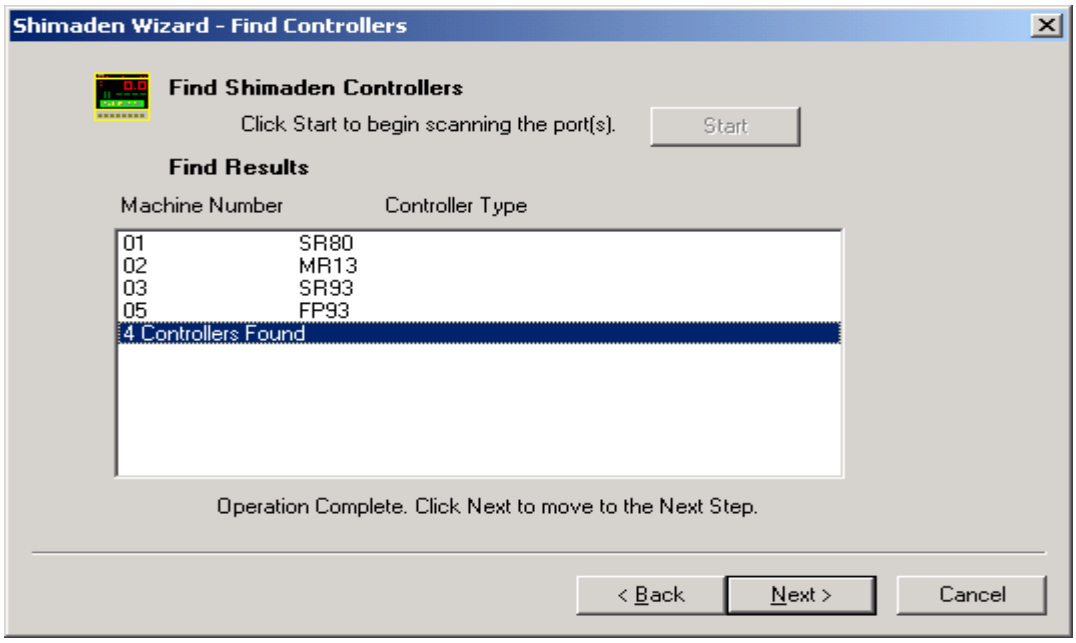


Click Start to begin scanning the controllers. As they are scanned, a Progress window is displayed.

Step 6: - Search Progress

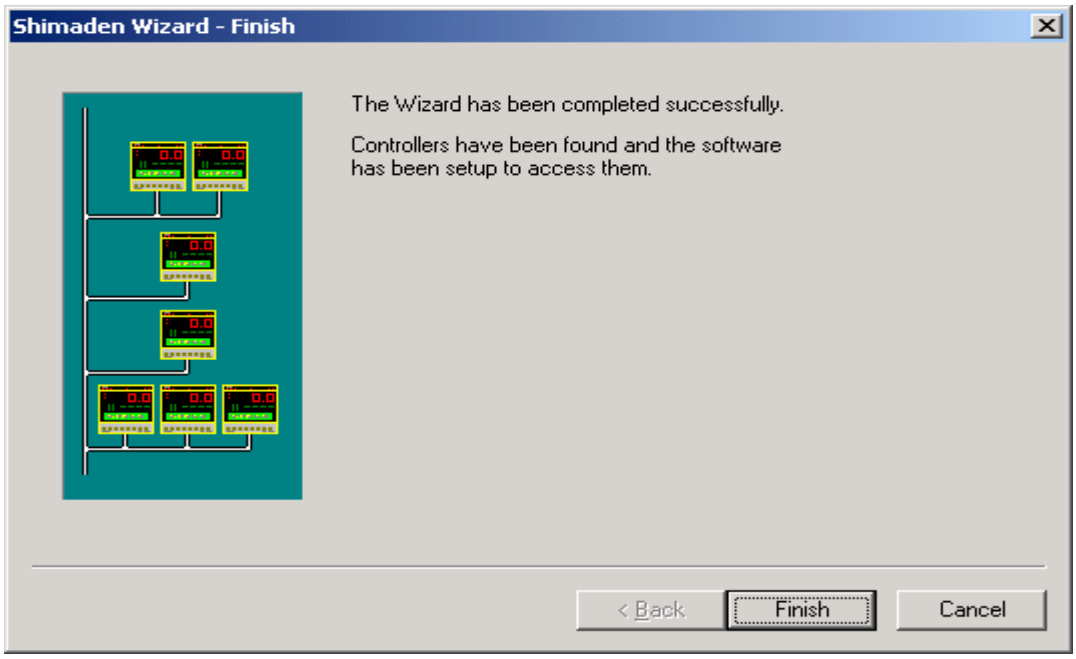


Step 6: Search Complete



Click Next.

Step 7: Finish



Click Finish to save the changes and start using the software with the controllers found.

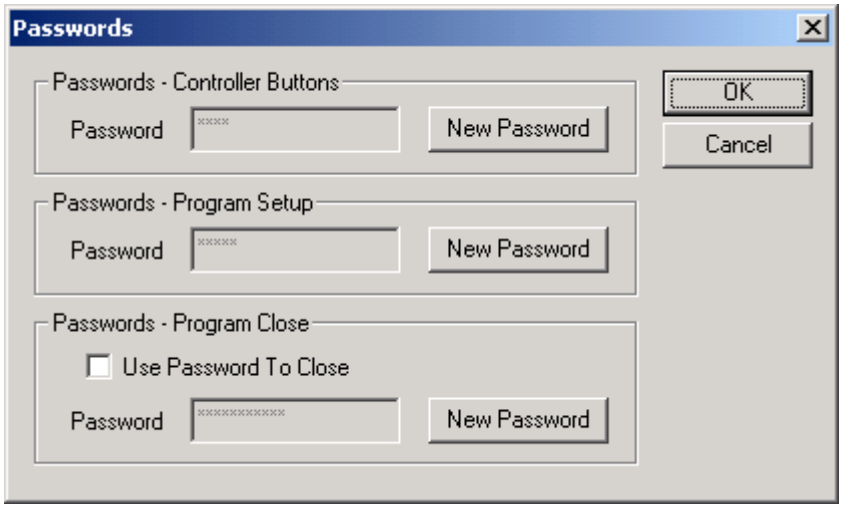
Access Codes

The access codes protect the software from being used without the correct level of access. They can only be entered or canceled from the Home Page.

Click “Enter Access Code” to enter an access code.
Click “Cancel Access” to cancel an access code.

Setting Access Codes

On the Home Page, Click Setup,”Passwords”

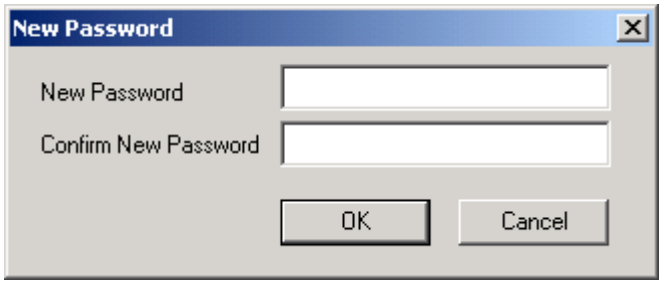


The Controller Button password protects the controller buttons.
The Setup password protects the program setups.
The Program Close password is required if “Use Password to Close” is clicked.

Default passwords

Controller Buttons	sr25
Program Setup	setup
Program close	systemclose

Click New Password to enter a new password as required.



When “Use Password to close” is clicked, the program starts with the setups and buttons protected and a password must be entered to use them. When the setup password is entered, the button password is automatically set.

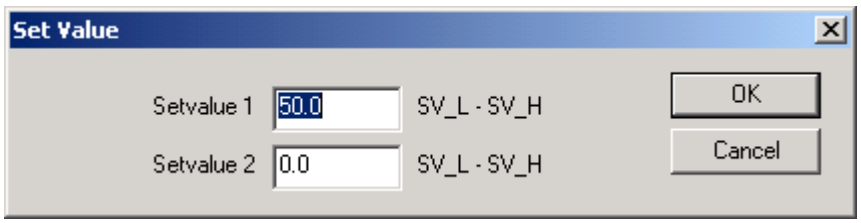
SR80 Dialog Boxes

Tool Bar

Com / Local

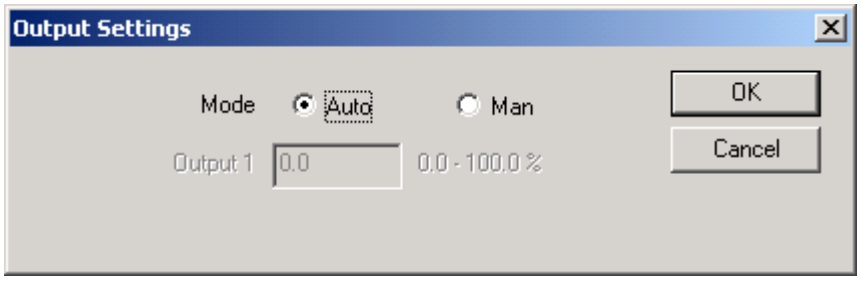
Click COM to put controller into COM mode, LOC to put controller into LOCAL mode. Click OK to write data to the controller.

SetValue



Enter the Set values and click OK to write data to the controller.

Output Settings



Click “Auto” for auto operation, click “Man” and enter a value for Manual operation. Click OK to write the data to the controller.

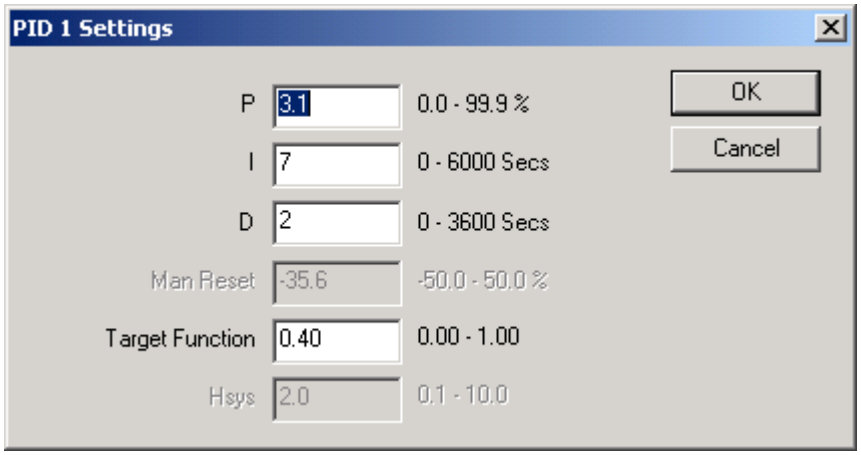
Auto Tune

Click On to start Auto Tune, Click Off to cancel Auto Tune. Click OK to write the data to the controller.

Standby

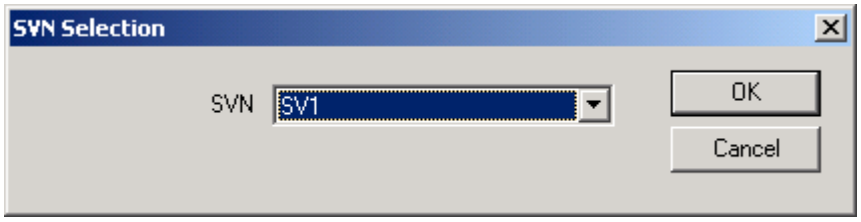
Click ON to put controller into standby mode. Click OK to write the data to the controller.

PID 1,2,3,4



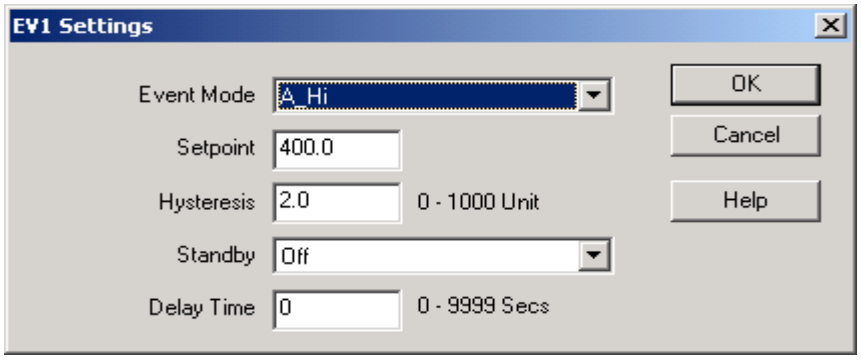
Enter the PID parameters as required, Click OK to write the data to the controller.

SVN Selection



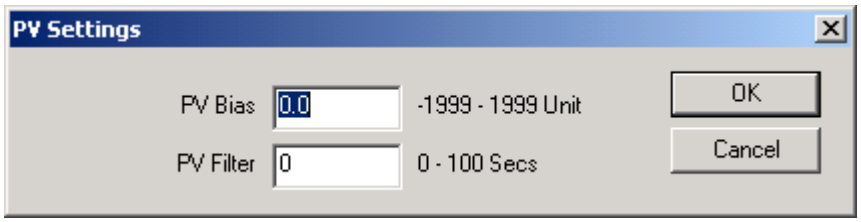
Select the SVN mode, Click OK to write the data to the controller.

EV1,2,3



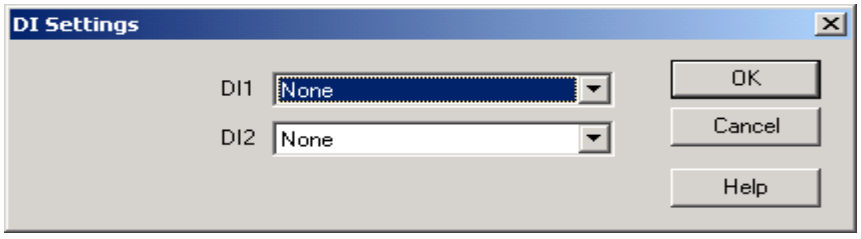
Select the Event settings as required, Click OK to write the data to the controller.

PV Settings



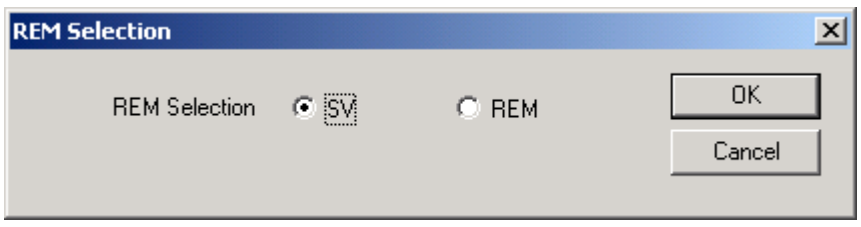
Enter the values for PV Bias and Filter, Click OK to write the data to the controller.

DI Settings



Select the mode for DI operation, Click OK to write the data to the controller.
When a DI mode is set, that operation cannot be performed via the software.
i.e if DI is set to Auto Tune, Auto Tune cannot be started via the software.

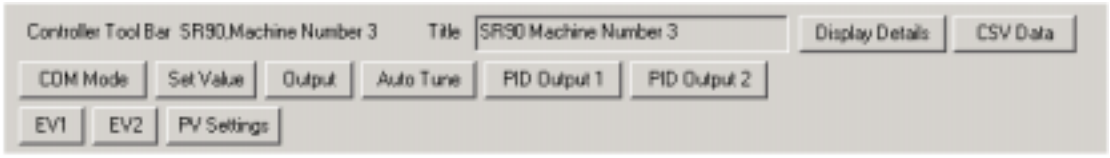
REM Selection.



Select Remote Mode, choose SV to use Set value or REM to use Remote set value
Click OK to write the data to the controller.

SR90 Dialog Boxes

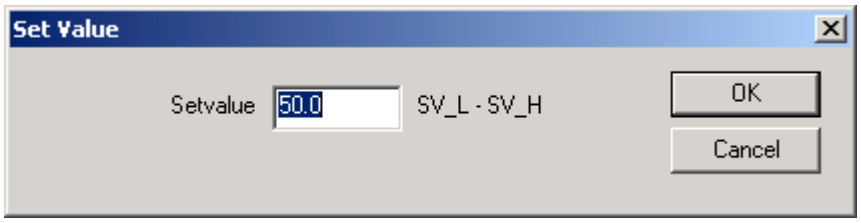
Toolbar



COM Mode

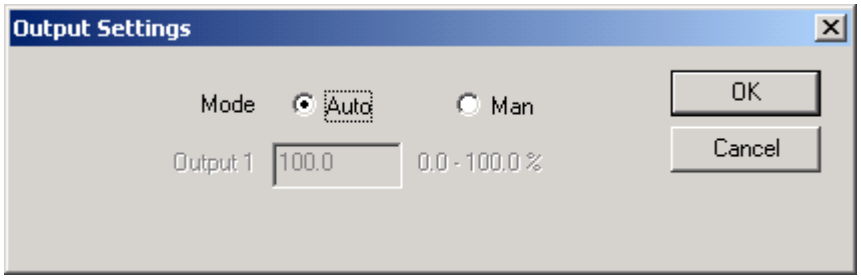
Click COM to put controller into COM mode, LOC to put controller into LOCAL mode. Click OK to write data to the controller.

Set Value



Enter the Set value and click OK to write data to the controller.

Output

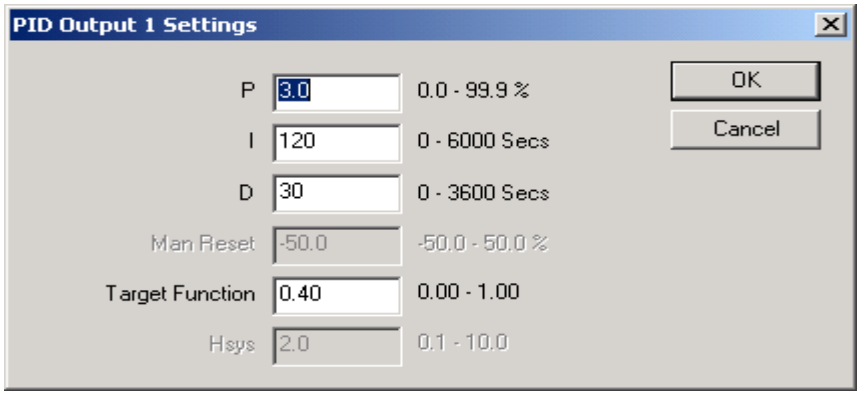


Click “Auto” for auto operation, click “Man” and enter a value for Manual operation. Click OK to write the data to the controller.

Auto Tune

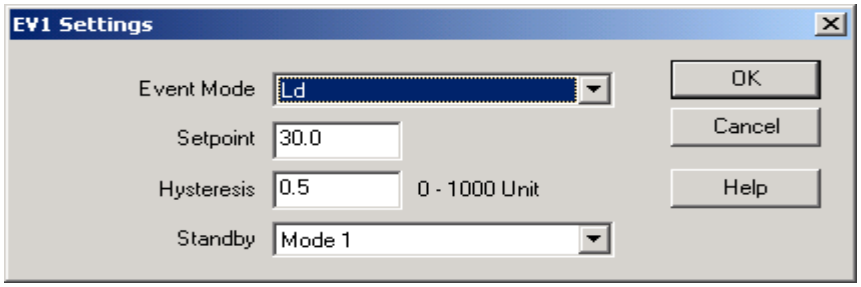
Click On to start Auto Tune, Click Off to cancel Auto Tune. Click OK to write the data to the controller.

PID Output 1,2



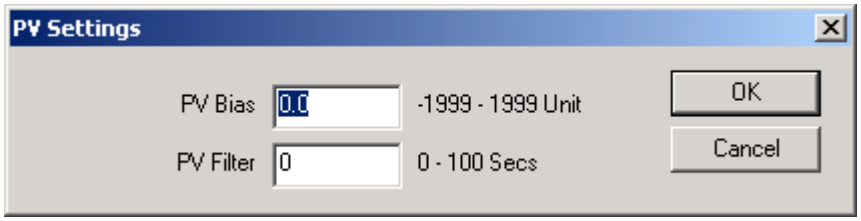
Enter the PID parameters as required, Click OK to write the data to the controller.

EV1,EV2



Select the Event settings as required, Click OK to write the data to the controller.

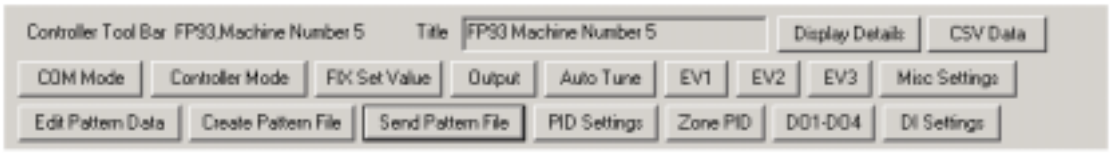
PV Settings



Enter the values for PV Bias and Filter, Click OK to write the data to the controller.

FP93 Dialog Boxes

Toolbar



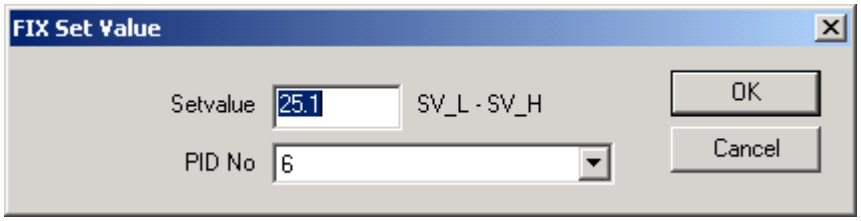
COM Mode

Click COM to put controller into COM mode, LOC to put controller into LOCAL mode. Click OK to write data to the controller.

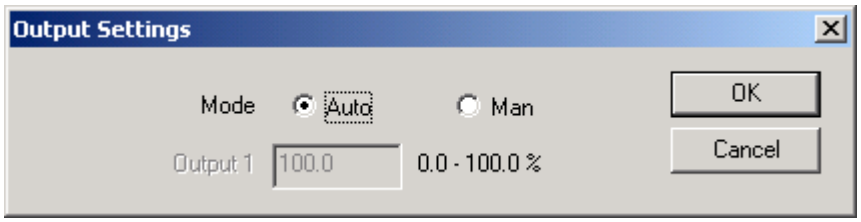
Controller Mode

See FP93: Controller Mode

FIX Set Value



Output

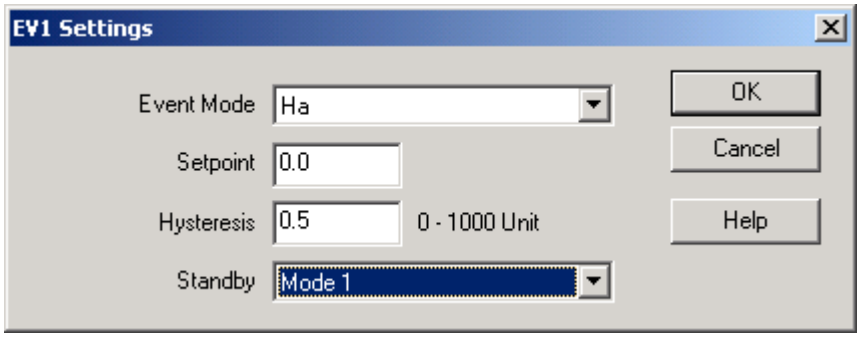


Click “Auto” for auto operation, click “Man” and enter a value for Manual operation. Click OK to write the data to the controller.

Auto Tune

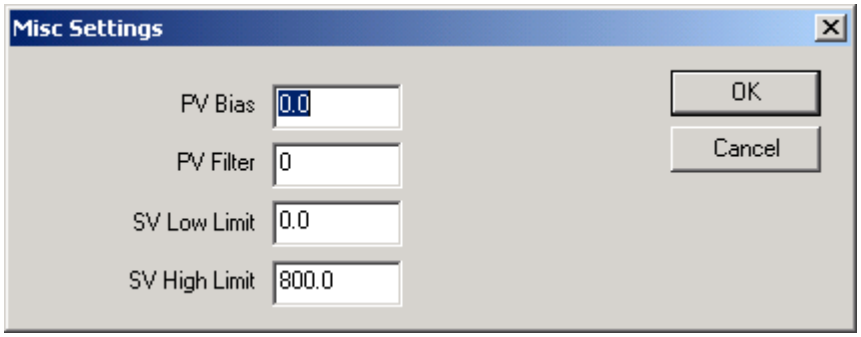
Click On to start Auto Tune, Click Off to cancel Auto Tune. Click OK to write the data to the controller.

EV1,2,3



Select the Event settings as required, Click OK to write the data to the controller.

Misc Settings



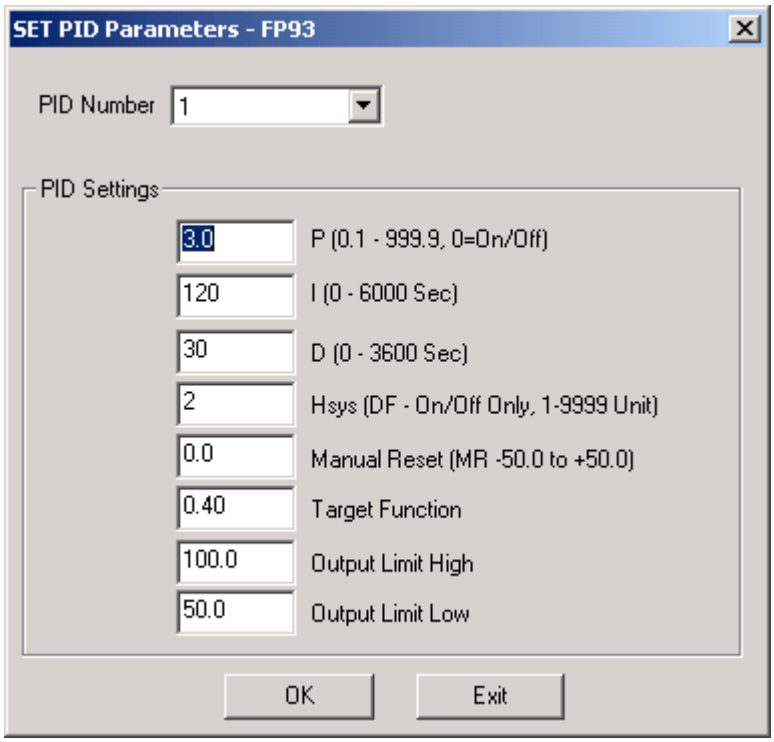
Enter the values for PV Bias and Filter and SV Limits, Click OK to write the data to the controller.

Edit Pattern Data
See FP93: Edit Pattern Data

Create Pattern File
See FP93: Create Pattern File

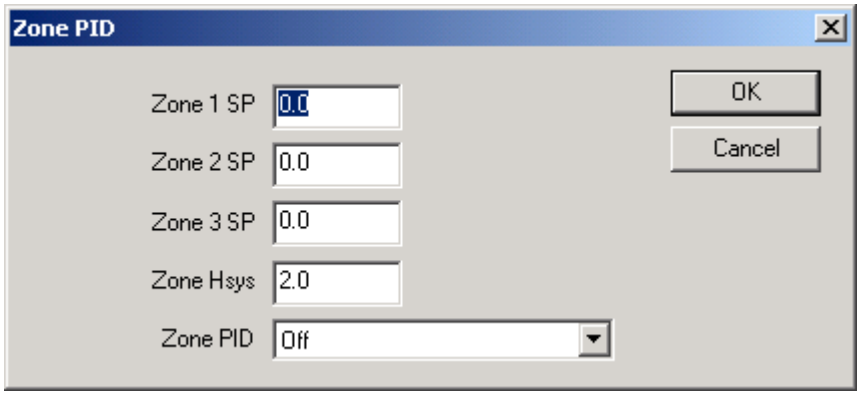
Send Pattern File
See FP93: Send Pattern Data

PID Settings



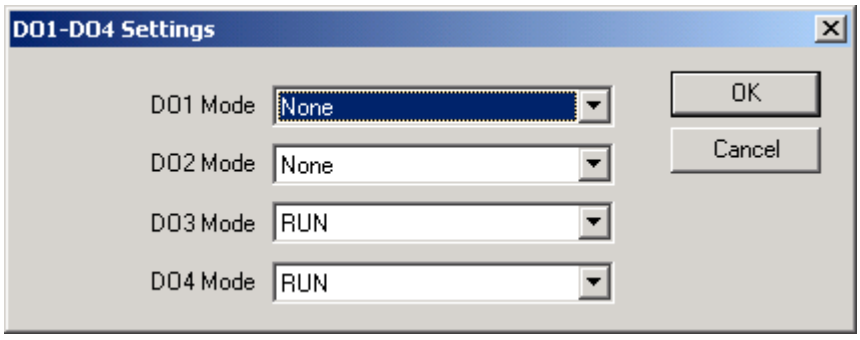
Select a PID Number, enter the PID parameters as required, Click OK to write the data to the controller.

Zone PID



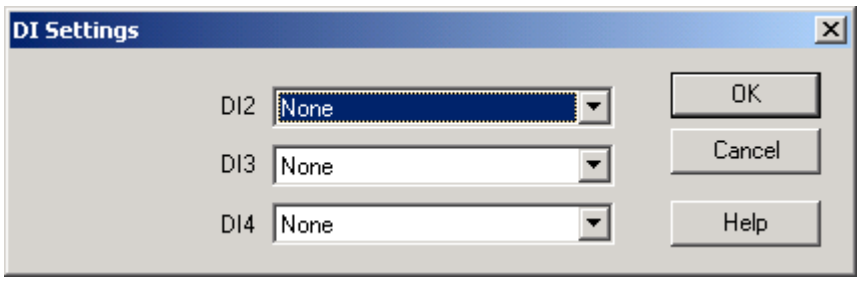
Enter the Zone PID parameters as required, Click OK to write the data to the controller.

DO1-DO4



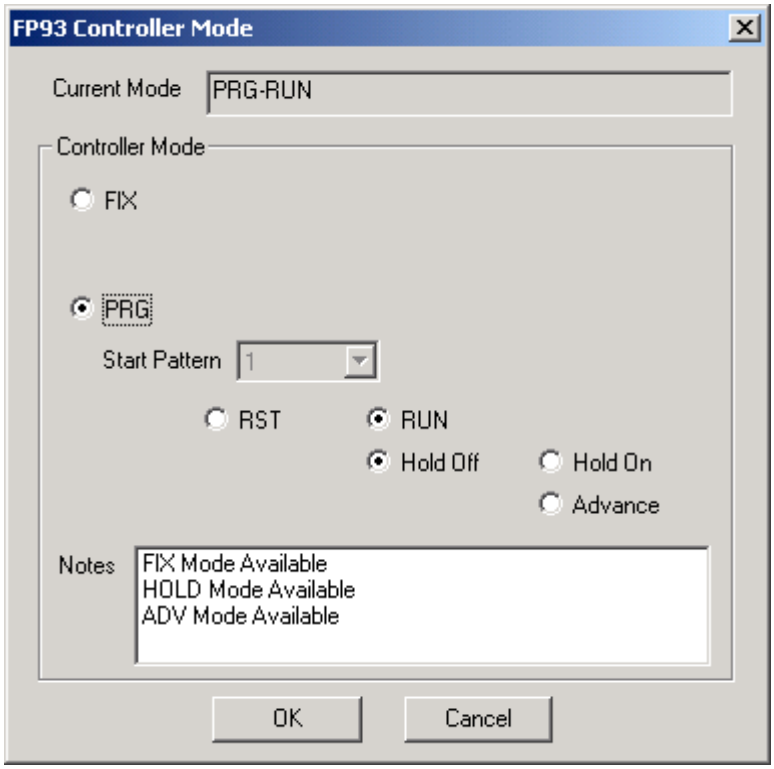
Enter the DO Output parameters as required, Click OK to write the data to the controller.

DI Settings

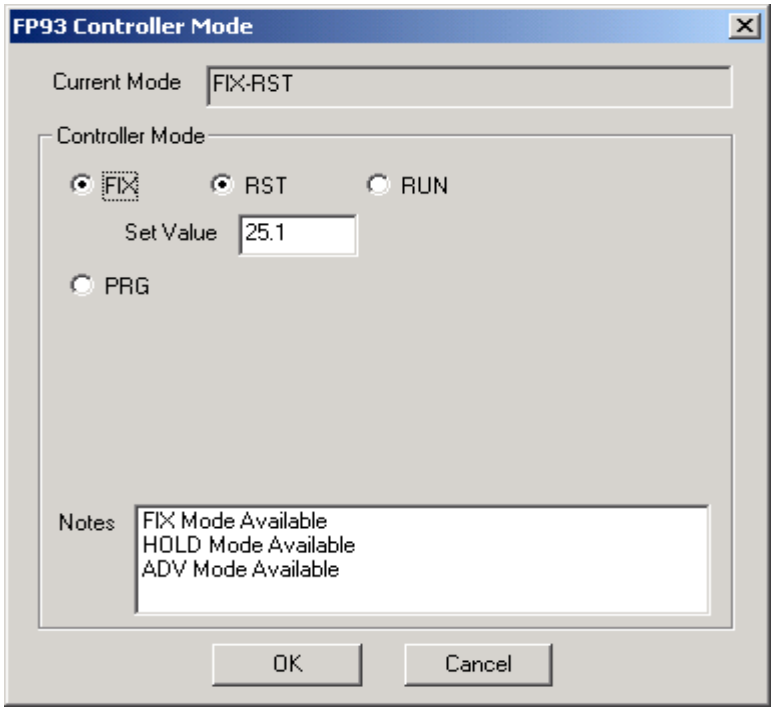


Select the mode for DI operation, Click OK to write the data to the controller.
When a DI mode is set, that operation cannot be performed via the software.
i.e if DI is set to Auto Tune, Auto Tune cannot be started via the software.

FP93: Controller Mode



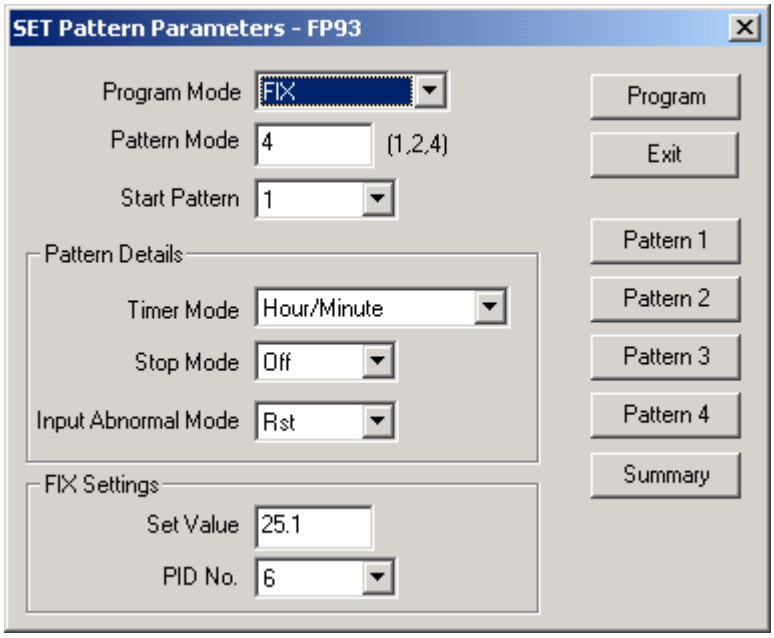
The controller is in pattern mode, click RST to stop the pattern, RUN to start it.



The controller is in FIX mode, click RST to stop the control action, RUN to start it.

If a DI input is set to FIX, HOLD or ADV, this will be noted at the bottom of the dialog box as the software control of these functions will not be permitted.

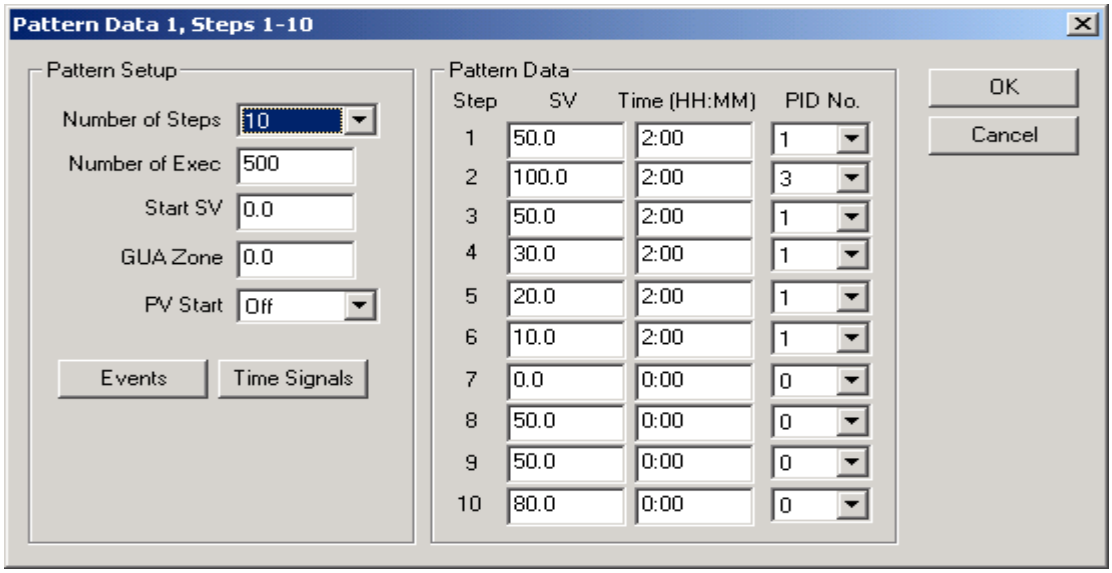
FP93: Edit Pattern Data



Click Program to program the pattern data to the controller.
Click Pattern 1 to edit Pattern 1 Data
Click Pattern 2 to edit Pattern 2 Data
Click Pattern 3 to edit Pattern 3 Data
Click Pattern 4 to edit Pattern 4 Data

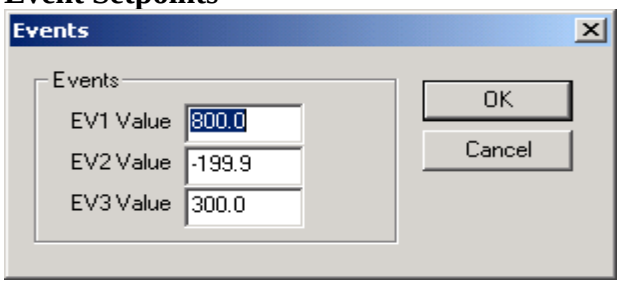
If the controller is currently executing a pattern, you will be able to view the data, but not program any changes back to the controller.

Pattern Data

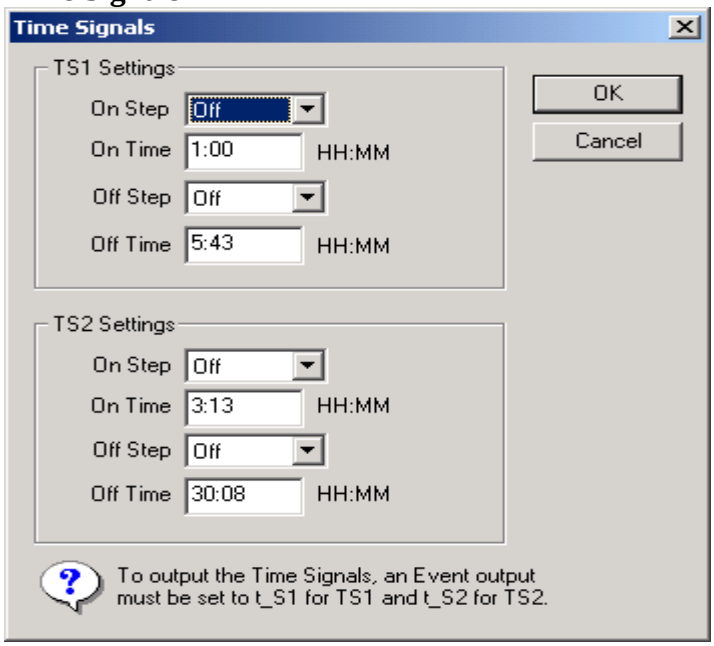


Click OK to enter the data.
Click Events to Edit the Events setpoints
Click Time Signals to Edit the Time Signals.

Event Setpoints



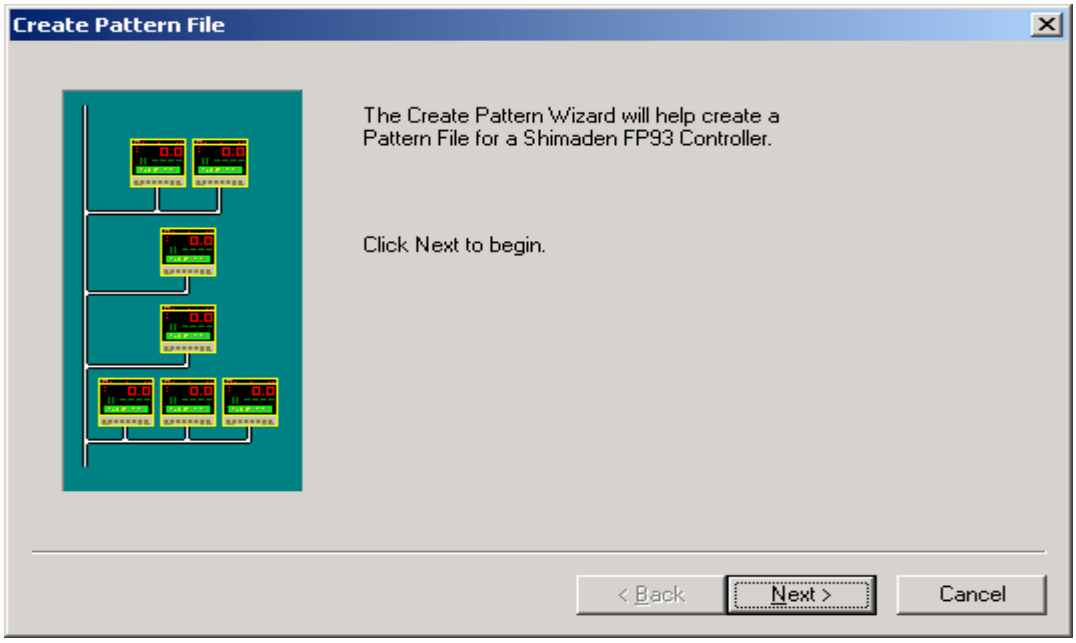
Time Signals



FP93: Create Pattern File

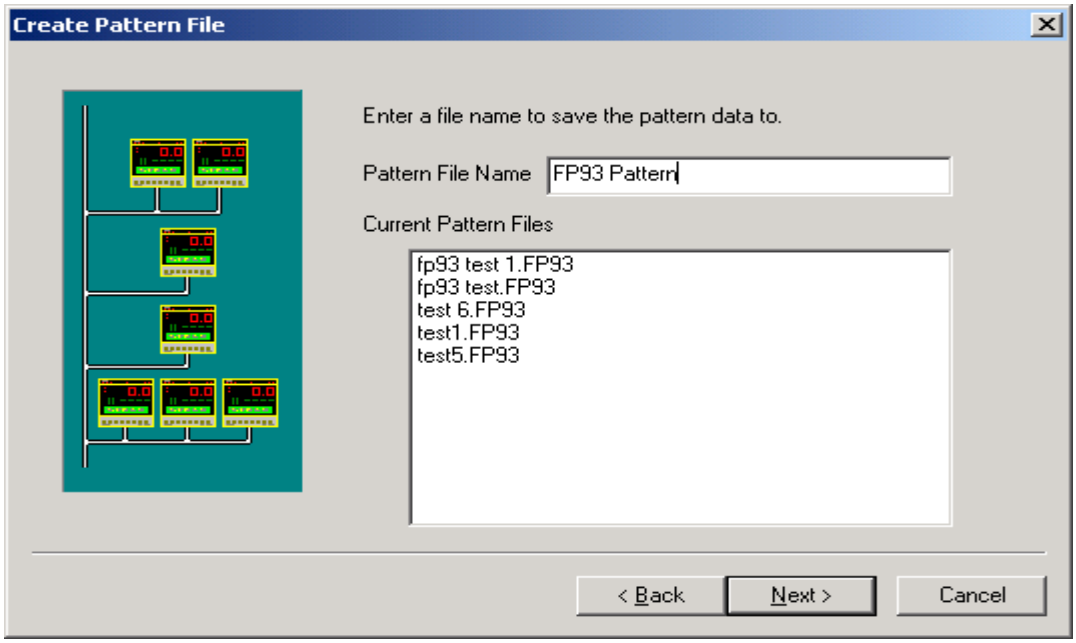
Reads the pattern data from the controller to create a pattern file.
ALL DATA for the patterns 1-4 is read from the controller and saved in a file.

Step 1:



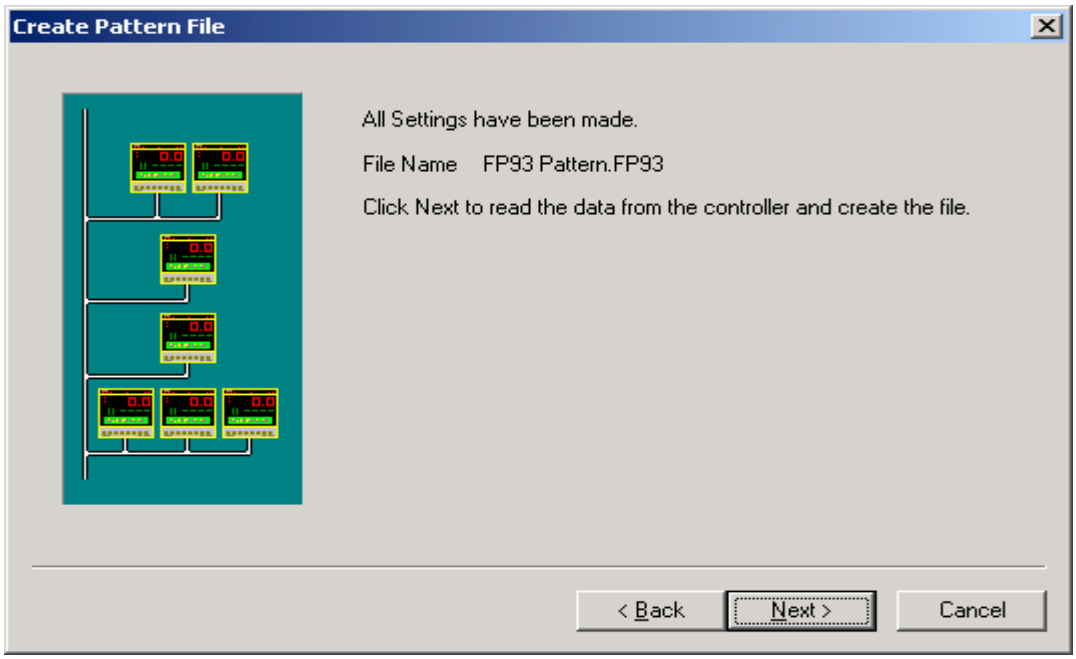
Click Next

Step 2:



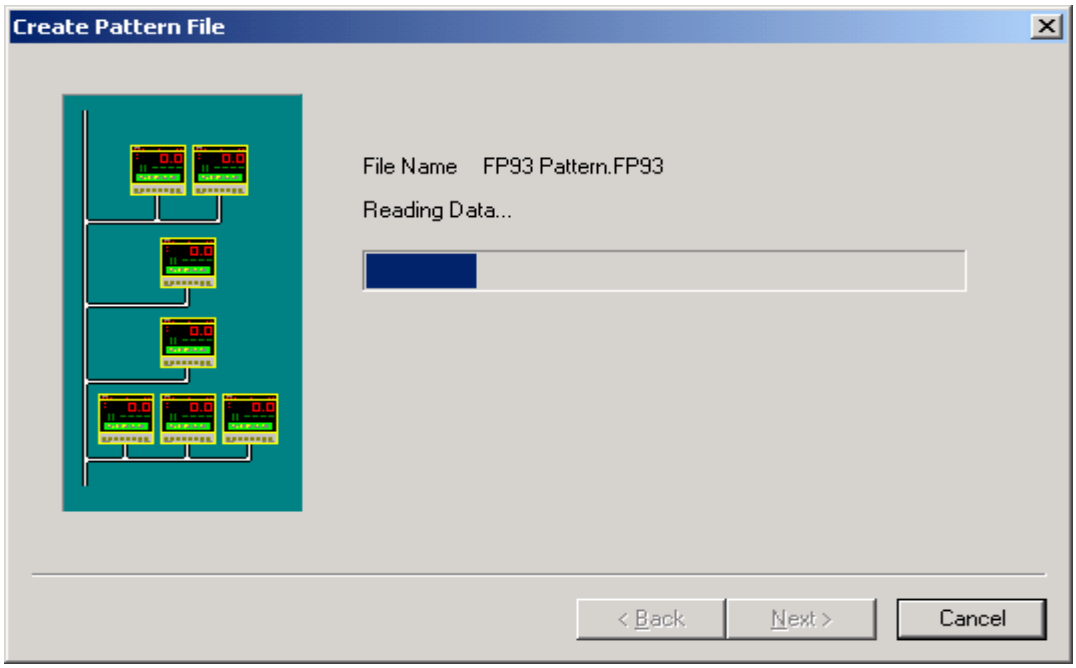
Enter or select a Filename and Click Next

Step 3:

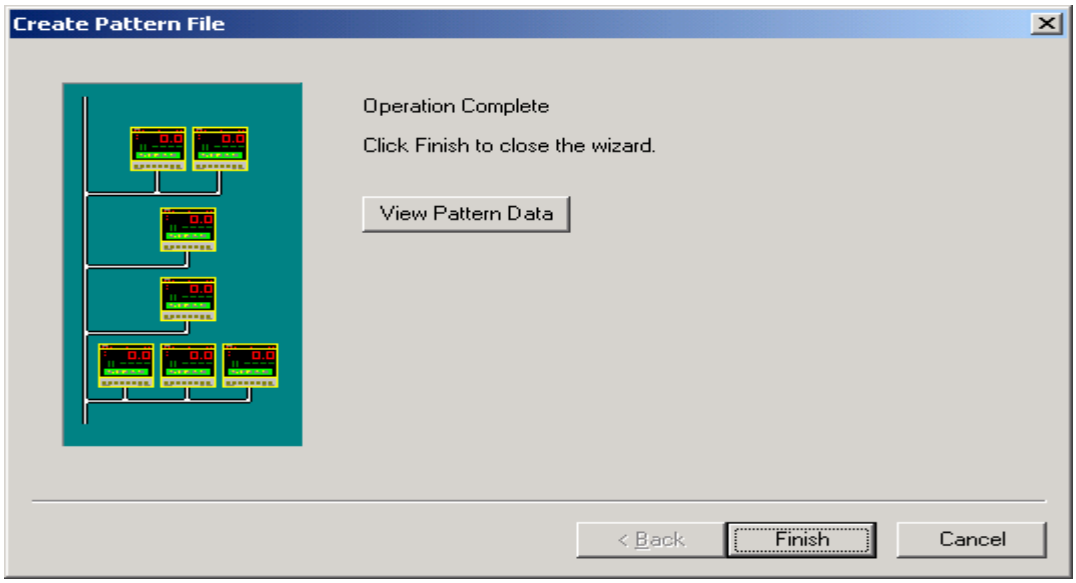


Click Next

Step 3: In Progress



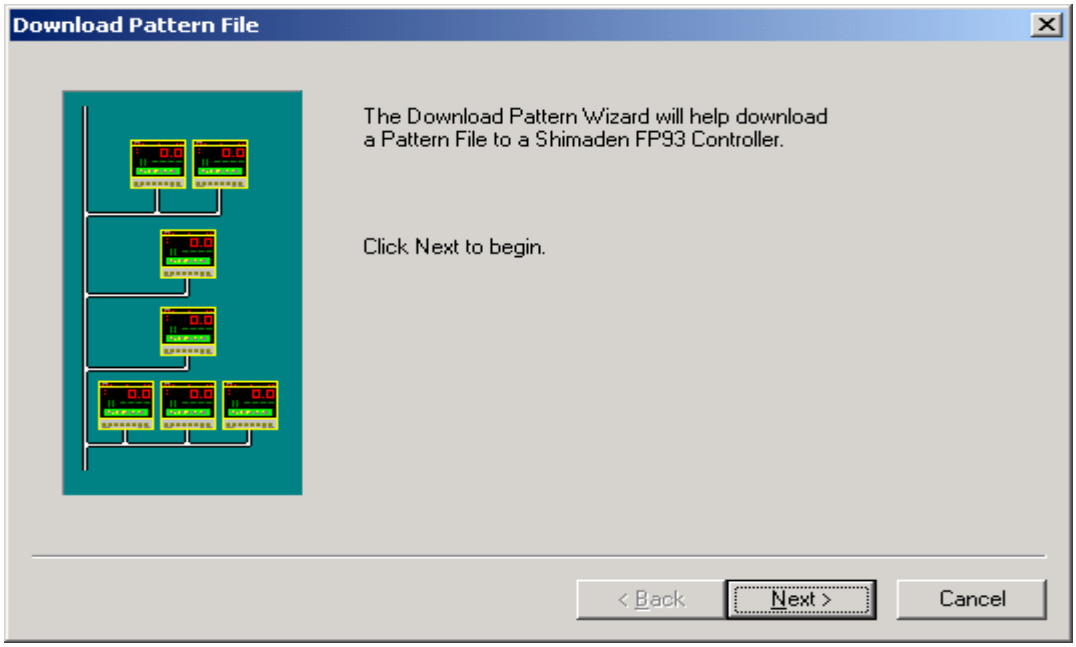
Step 4: Operation Complete



FP93: Send Pattern File

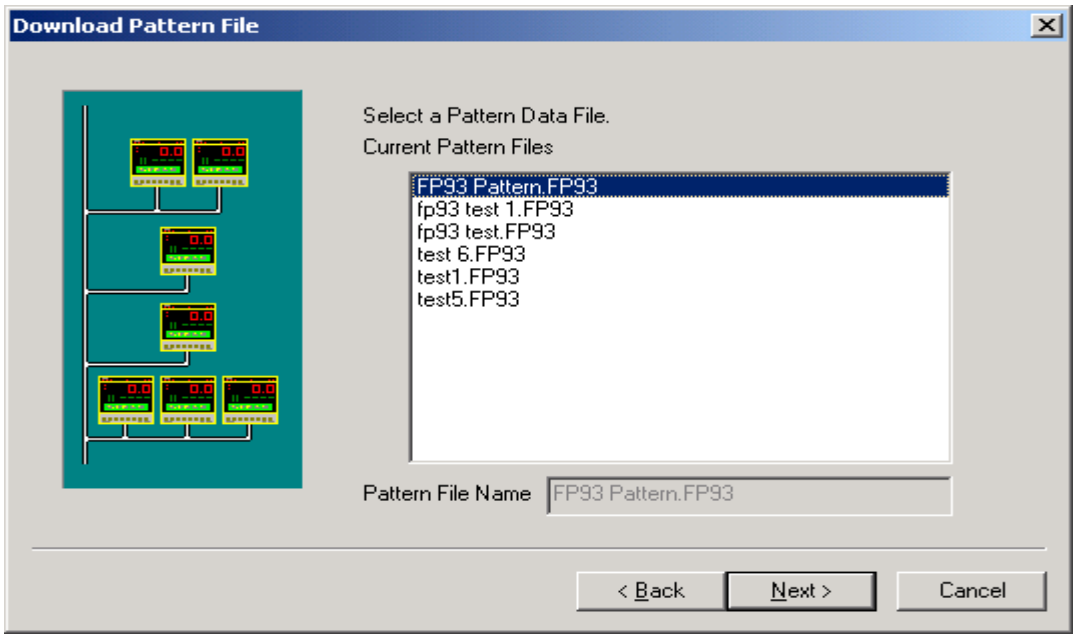
The Send Pattern File downloads a pattern file to the controller.

Step 1:



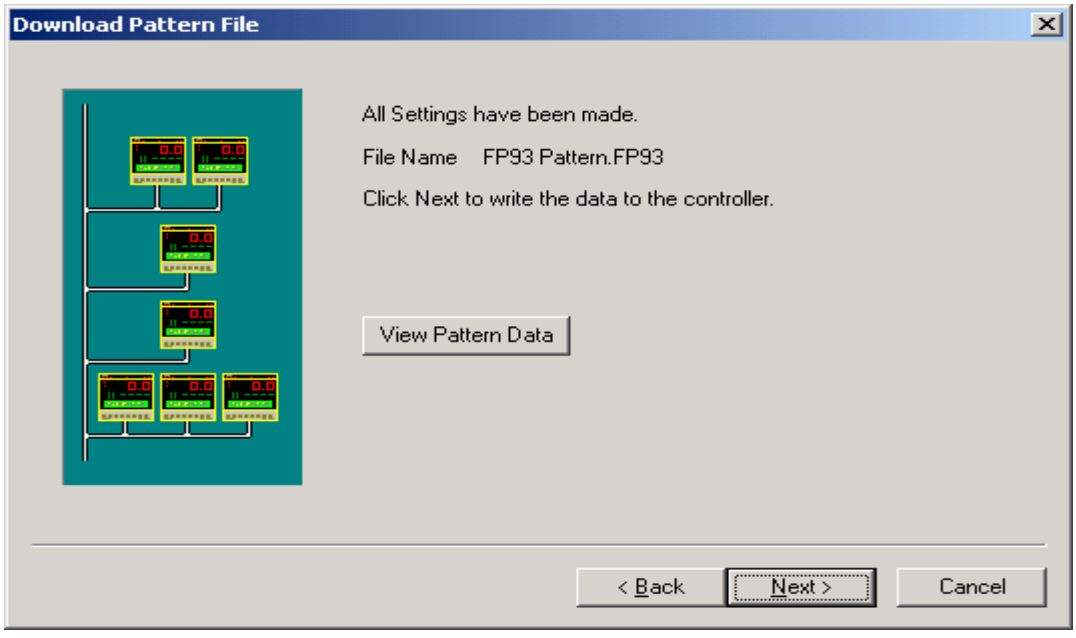
Click Next.

Step 2:



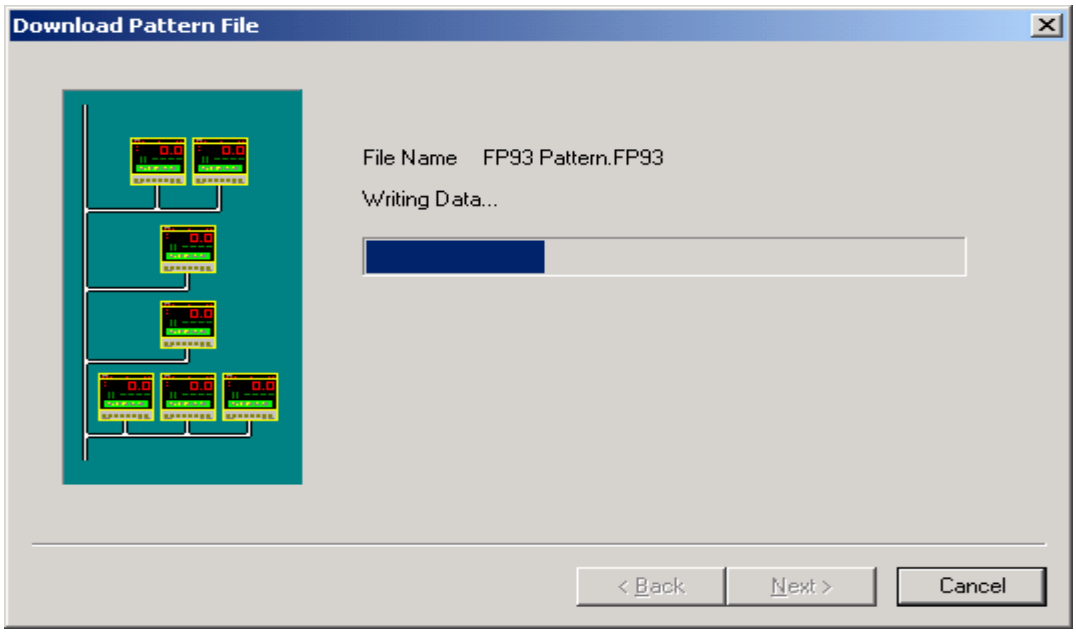
Select a filename and click Next.

Step 3:

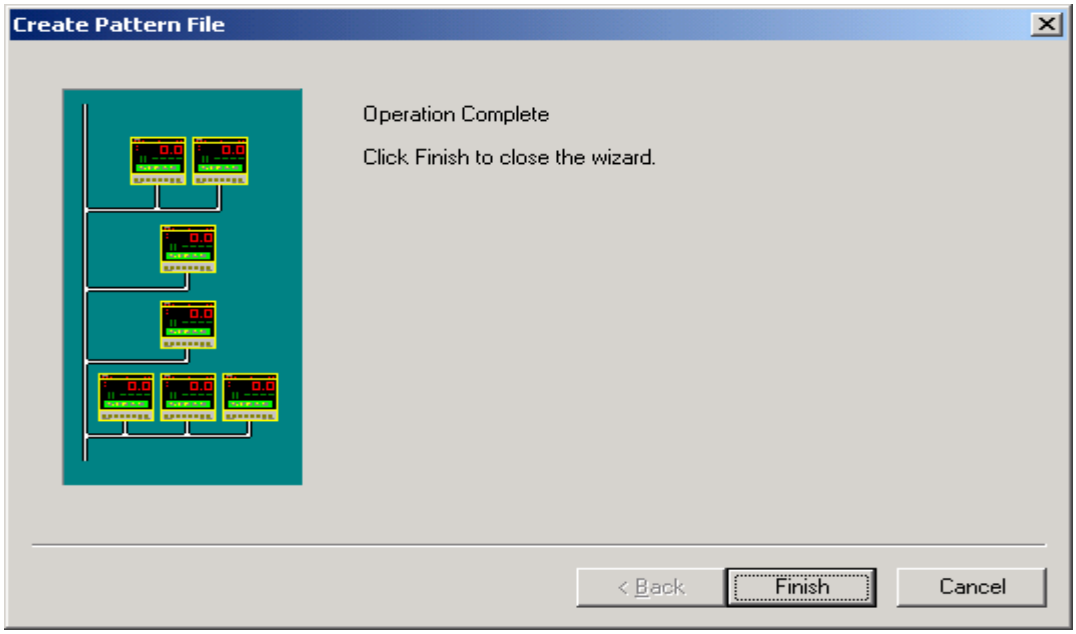


Click Next:

Step 3: In Progress.



Step 4:



Click Finish.