SJE-Rhombus

# **EZ Series® In-site® CL control panel** EZ Connect User Guide

## SUPPORTED PLATFORMS

The EZ Connect software is designed to run on Microsoft Windows 7. It is also supported for use on Windows XP, Windows Vista installations that have the .NET framework 2.0 or higher installed. If the .NET framework is not installed, the EZ Connect installer will prompt you to install it. Running the program executable without the framework present will result in an error.

### MINIMUM SYSTEM REQUIREMENTS

- Intel Pentium III 800 MHz or AMD Duron 800 MHz
- 512 MB RAM
- Windows XP Service Pack 2, Windows Vista, & Windows 7 (.NET 2.0 installation)
- 10 MB free hard drive space
- 1024 x 768 screen resolution
- Available USB port

#### **OPERATION**

The EZ Connect application is provided to support the EZ Series<sup>®</sup> In-Site<sup>®</sup> CL product line. EZ Connect has two primary functions. First, it is used to set operation parameters in the EZ Series In-Site CL panel. Second, it is used to transfer events stored in the panel to a PC file. The information is then read into the In-Site Reporting application.

The application uses the ModBus communications protocol to interface with the EZ Series In-Site CL panel. The interface is an industry standard and will allow other SCADA based applications to access and monitor the EZ Series In-Site CL panel.

#### **A NOTE ABOUT MAKING CHANGES**

When making changes to parameters or data, the application tracks pending changes by changing the field background color to yellow. Clicking the **Apply** button sends the changes to the panel. The yellow background color is removed when the panel confirms the change has been applied. If a user attempts to exit after changing an item without clicking the **Apply** button, EZ Connect will display a warning message. The user is given the option to return to complete the update or continue exiting the display.

#### **CONNECTING TO AN EZ IN-SITE CL PANEL**

Attach a portable PC to the EZ Series In-Site CL panel via the EZ Series In-Site CL data connection cable (SJE part number 1032222). The user starts the EZ Connect application and establishes a connection from the PC to the EZ Series In-Site CL panel. The application starts with an EZ Connect welcome display.



Click on the **Find Unit** button to search for and connect to an EZ Series In-Site CL panel. The application will either display a "unit not found" pop-up message, or will go to the *Status* display screen. The **Exit** button will close the application.

The Comm Setup menu option takes the user to the *Comm Setup* display. This option is used for configuring the communication settings for the PC. These settings should not be changed without instruction from an SJE-Rhombus Customer Service Representative.

Comm Setup			×
	EZ In-Site Address PC Port Baud Rate Read timeout Write timeout	1 COM4 <b>v</b> 115200 <b>v</b> 300	
		Return	

#### **STATUS DISPLAY**

The *Status* display offers a quick reference to EZ Series In-Site CL operating parameters. All settings are updated once per second. The information is read only and the user must go to other displays to change run parameters.

SIF Whom	sinus				
7 In Site Setu	n: Dunlay Tir	ad Pump Down			2/7/2012 10:43:09 AM
Control Board ID	121309874	Firmware Release Modbus Address	0.2 1	40	7
Pump 1		Pump 2			
HOA State	Δυτο	HOA State	Δυτο		Alarm - 32.0 in
Run Time (h:mm)	0:53	Run Time (h:mm)	1:30	30-	Override - 32.0 i
Cycle Count	121	Cycle Count	143	30	
Pump Settings	C-Level Settings				
		-			Timer - 24.0 in Enable
Pu	imping Operation	limed		20 -	-
Pu	imp Sequence	Att			
Tir	ned Dose On	0:00:30			
Tir	ned Dose Off	0:00:30			
Tir	ned Dose Override O	n 0:00:30		_	4
Tir	ned Dose Override O	ff 0:00:30		10-	A
				9.2 in	' \
	Change	Pump			
	Seu	190			Redundant - 12
					Off
	Set Clock	Download		Pane	Beturn
	A DESCRIPTION OF THE REAL PROPERTY OF THE REAL PROP	a second s		the second se	EXPERIMENT.

## **CHANGING HAND-OFF-AUTO SETTING**

Clicking the HOA State or the current state of Pump 1 or 2 on the Status display screen opens a pop-up menu that allows Hand-Off-Auto pump mode selection.

Pump 1	Set HOA	
HOA State 🔓 AUTO	Pump 1 O Off O Hand O Auto	Pump 2 O Diff O Hand O Auto
	Refresh	Apply

If changes to the HOA settings were made, unapplied changes will be highlighted in Yellow. Click the **Apply** button to save the changes before returning to the *Status* display or the changes will not be recorded in the EZ Series In-Site CL panel.

Set HOA	
Pump 1 Off Off Hand Auto	Pump 2 O Dff O Hand O Auto
Refresh	Apply Return

Note: Clicking the Apply button helps prevent the user/unit from "Accidental" setting changes and causing potential damage to the user/unit.

## **ERASING PUMP RUN TIME**

Run Time (h:mm)	0:53
Cycle Count 🛛 📉	121

Clicking on either "Run Time" or the current value in the *Status* display screen will issue a prompt to erase the Run Time. **Two** prompts will be given before the Time is erased. (Note: Erasing Pump Run Time is a permanent operation and the action cannot be reversed.)

#### Prompt 1



## **ERASING PUMP CYCLE COUNT**

Run Time (h:mm)	0:53
Cycle Count	121

Prompt 2 - Clicking Yes will permanently erase the Pump Run Time value

Erase Pump 1 Run Time?
This Will Permanently Erase Pump 1 Run Time!
Are You Really Sure You Want To Erase?
Yes No

Clicking on either "Cycle Count" or the current value in the *Status* display screen will issue a prompt to erase the Pump Cycle Count. **Two** prompts will be given before the count is erased. (Note: Erasing Pump Cycle Count is a permanent operation and the action cannot be reversed)

#### Prompt 1



Prompt 2 - Clicking Yes will permanently erase the Cycle Count value

Erase Pump 1 Cycle Count?	
This Will Permanently Erase Pump 1 Cycle Count!	
Are You Really Sure You Want To Erase?	
Yes No	

#### **SETTING PUMP PARAMETERS**

Clicking on the Pump Settings tab on the Status display screen shows the current Pump Settings.

Status						? 🛛
SJE Rhon	<b>1045</b> 19: Duplex, Tim	ed. Pump Down			2/7/2012 1	10:43:09 AM
Control Board ID	121309874	Firmware Release Modbus Address Pump 2	0.2 1	40		
HOA State	E AUTO	IDLE HOA State	AUTO			larm - 32.0 in verride - 32.0 in
Cycle Count	0:53	Cycle Count	1:30	30 -		
Pump Settings	C-Level Settings					210 10
Pi	imping Operation	Timed		20	E	nable
Pu	imp Sequence	Att		20 -	Г	
Ti	med Dose On	0:00:30				
Ti	med Dose Off	0:00:30				
Ti	med Dose Override O	n 0:00:30				
т	med Dose Override O	ff 0:00:30		10 - 9.2	in	
	Change Setti	Pump ngs		0	R	edundant - 12.0 in ff
	Set Clock	Download Log		Pa Run	net ning	Return

To change pump operation parameters, click on the Change Pump Settings button to open the Change Parameter display.

ş	Change Parame	ter			×	
	Setup Pumping Operation Pump Configuration Pump Sequence	Timed V Duplex V Alt V	•	Timed Dose Settings Timed Dose "On" Timed Dose "Off" Override Timed Dose "On" Override Timed Dose "Off"	0:00:30 0:00:30 0:00:30 0:00:30	
	Refresh				Return	

Clicking on "Timed Dose Setting" in the "Change Parameter" screen opens a dialog box for the Enter Time function.

🗯 Change Parameter	
Enter Time Timed Dose On (Cancel) Done	
Refresh	Return

Adjust the setting to the desired time and click the **Done** button when complete.

The new value is displayed in the "Change Parameter" screen with a yellow background. Click the **Apply** button before exiting the screen for changes to be downloaded to the panel.

50	🕷 Change Parameter 🛛 🔀							
	Setup Pumping Operation Pump Configuration Pump Sequence	Timed Duplex	<b>&gt; &gt;</b>	Timed Dose Settings Timed Dose "On" Timed Dose "Off" Override Timed Dose "On" Override Timed Dose "Off"	0:00:20 0:00:30 0:00:30 0:00:30			
[	Refresh				Return			

Continue to select run parameters to be changed as needed. Click the **Apply** button to have the changes sent to the EZ Series In-Site CL panel. Unapplied changes will be highlighted with **yellow**.

The pump's configuration can also be changed in the "Change Parameter" screen. Changing the **Pump Configuration** will set the HOA state to **OFF**. The user must **manually** return the state to Auto to resume normal operation.

Note: Clicking the Apply button helps prevent the user/unit from "Accidental" setting changes and causing potential damage to the user/unit.

If changes are not applied and the user clicks the Return button the following prompts will appear:

Discard - Go Back
Do you want to Discard Changes or Go Back?
Discard Changes Go Back

Clicking the **Discard Changes** button opens the *Status* display and changes will **not** download to the panel. Clicking the **Go Back** button re-opens the "Change Parameter" screen.

#### **CHANGING LEVEL SETTINGS**

Clicking on the C-Level Settings tab shows the current C-Level sensor settings.

Control Board ID	ip: Duplex, Tim 121309874	ed, Pump Down Firmware Release Modbus Address	0.2 1	40	
HOA State Run Time (h.mm) Cycle Count	E AUTO 0:53 121	HOA State Run Time (h:mm) Cycle Count	AUTO 1:30 143	30 -	Alarm - 32.0 in Override - 32.0 in
Pump Settings	C-Level Settings				
	Sensor Units Pumping Direction	Tenths of Inches Down		20 -	Timer - 24.0 in Enable
	C-Level Range	40.0			
	Operating Range	40.0			
	Override Level	32.0			
	Timer Enable	24.0			
	Redundant Off	12.0		9.2 1	
	Change Settin	level igs		0	Redundant - 12.0

The *C-Level Settings* display allows the user to enter pumping direction, operating range, sensor units and set-point levels. To change the C-Level sensor settings, click the **Change Level Settings** button. **Note:** Pumping direction should NEVER be changed in a given installation, where the direction of flow is fixed.

Changing the pumping direction requires the set-point levels to be changed and sets the HOA state to **OFF**. The user must **manually** return the state to **Auto** to resume normal operation.



## SETTING THE EZ SERIES IN-SITE CL CLOCK

Clicking the Set Clock button on the Status display screen opens the "Date/Time Set" screen to set the date and time of the EZ Series In-site CL panel.

I Date/Time Set
PC Date/Time 2/7/2012 1:20:50 PM
Month     Day     Year     Hour     Minute     Second       EZ Logger     2     /     7     /     2012     13     :     21     :     3
Set to PC Date/Time Set to entered date/time
Refresh

The date and time can be set by using the up and down arrows and then clicking the **Set to entered date/time** button. Another option is to click on **Set to PC Date/Time** button. The **Refresh** button will read the date/time from the panel and display it. The **Return** button re-opens the *Status* display screen.

#### **DOWNLOADING THE EVENT LOG**

The Download Log button on the Status display screen opens the "EZ In-Sit Log Download" display.

EZ In-Site Log Download	
Do not interrupt transfer once it has	been started.
Start Transfer	Return

Pressing the Start Transfer button reads the events that have accumulated in the panel and puts the information into a file for the In-Site Reporting application.

After clicking the **Start Transfer** button the user is prompted to select a folder. Transferred information is stored in a file in the "C:\\EZ In-Site\EZ#####" folder by default, where ##### is the Control Board ID number. A different folder can be chosen if desired.

The transferred information is in a file named "TfrYYYYMMDD", where YYYY is the year, MM is the month number, and DD is the day of the month number. The file can be viewed only with the In-Site Reporting application.

Note: Use separate folders for each panel. An example of separate folders is shown below where EZ Series In-Site CL panel EZ121309874 has a different folder than EZ Series In-Site CL panel EZ1001506530. This prevents log files from being overwritten.

Browse For Folder	? 🔀
🖃 🥯 Local Disk (C:)	~
🗉 🚞 Altium Projects Backup	
🗉 🚞 c98be586be217e58f7f2	
🗉 🧰 DELL	=
🗉 🚞 Documents and Settings	
🖃 🧰 EZ In-Site	_
EZ0112108956	
🗁 EZ121309874	
C EZ1001506530	
🗉 🚞 EZPanel	
🛅 flexim	
HP LJ1320 PCL5 Driver	~
	>
1	
Make New Folder OK	Cancel

Information begins to transfer after a folder location is selected and the OK button is clicked. The progress bar shows the current status of the transfer.

EZ In-Site Log Downloa	d
Do not interrupt transfe	er once it has been started.
Start Transfer	Return

The following is displayed at the end of the transfer.



# **ALARM DISPLAYS**

When an alarm condition is detected, EZ Connect will notify the operator and describe the alarm using a pop-up display as shown below. The display is removed when the alarm condition is no longer active.

	Alarm is active
Liquid Level is High. Make sure pump(s) are running.	High Level Alarm
	Alarm is active
Check C-Level and C-Level wire connections	C Level Error
	Alarm is active
Check Redundant High. Make sure pump(s) are running.	Redundant High

# TROUBLESHOOTING

Problem: EZ Connect does not connect with the EZ Series® In-Site® CL panel
Corrective Action: Try the steps below, in the order shown. If a step does not establish a connection, move onto the next step until the problem is corrected.
1. Verify the EZ Series In-Site CL panel has power turned on and is operating; if not, turn on power to the unit. Try the connection again.
2. If power is on and EZ Connect is still not communicating; check the interface cable and insure each end is connected properly.
<ul> <li>3. If still not communicating, check the USB end of the cable and look for flashing LEDs. If the LEDs do not flash, perform the following steps: <ul> <li>a. Disconnect the USB end of the cable from the PC.</li> <li>b. Close the application.</li> <li>c. Re-insert the USB end of the cable into a USB slot on the PC.</li> <li>Wait for the USB device to be recognized. If the device (cable) is not recognized, proceed to step 4.</li> </ul> </li> </ul>
4. If still not communicating, try the connection with a different interface cable, if available.
5. If still not communicating, try an alternate USB port if available.
6. If still not communicating, try re-booting the PC.
7. Check the RCV LED on the EZ Series In-Site CL circuit board. Contact the panel supplier if the RCV LED is flashing but the XMT LED is not flashing, there maybe a problem with the panel.
8. Contact the supplier and/or have unit serviced.

<b>Problem:</b> Windows XP is giving a "driver not installed properly error". <b>Corrective Action:</b> Make sure computer is connected to an internet connection. After it is connected, follow the steps below:
1. Click on start
2. Click on Control Panel
3. Click on Printers and Other Hardware
4. Click on System in the left menu bar.
5. Click on the "Hardware" Tab then click Device Manager.
System Restore       Remote         System Restore       Automatic Updates         Computer Name       Hardware         Device Manager       The Device Manager is all the hardware devices installed or sport computer. Use the Device Manager to change the properties of any device.         Device Manager       Device Manager         Device Signing Met you make use the installed drivers are compable with Vindows Update       Device Manager         Device Signing       Windows Update       Hardware Profiles         Hardware Profiles       Hardware Profiles       Device Anger         DK       Cancel       Apply
<ul> <li>6. Click on the Ports Item to see if the USB serial port is installed. If it looks like the picture below (i.e. If there is a yellow exclamation on the device) continue to Step 7.</li> <li>Ports (COM &amp; LPT)</li> <li>Communications Port (COM1)</li> <li>ECP Printer Port (LPT1)</li> <li>Intel(R) Active Management Technology - SOL (COM3)</li> </ul>
If the ports tree looks like the picture below, contact supplier for more help with this issue Note: The port number maybe different on your system, i.e. not COM4. This is just fine and should not affect EZ Connect ability to communicate.

·J.	ECP Printer Port (LPT1)
Ţ	Intel(R) Active Management Technology - SOL (COM3)

- 💯 USB Serial Port (COM4)

Problem: Windows XP is giving a "driver no Corrective Action: Make sure computer is	ot installed properly error". connected to an internet connection. After it is connected, follow the steps below:
7. Right click the "USB Serial Port" and the	n left click on "Update Driver".
serial Port (CO) Constant Cons	
8. Select "Yes, this time only" and click New	xt.
	Hardware Update Wizard         Image: Constraint of the second s
9. Select "Install from a list or specific locat	tion (Advanced)" and click Next.
10. Select "Search for the best driver in the C:\Program Files\SJE Rhombus\EZ Connec Click Next.	ese locations" and then select "Include this location in the search:" and browse to the following location: ct/CDM20814_WHQL_Certified Flease choose your search and installation options.

Problem: Windows XP is giving a "driver not installed properly error".		
Corrective Action: Make sure computer is c	onnected to an internet connection. After it is connected, follow the steps below.	
11. Allow Windows to install the driver.		
	Hardware Update Wizard	
	Please wait while the wizard searches	
	USB Serial Port (COM4)	
	8	
	<back next=""> Cancel</back>	
12. After the driver install is done, click the F	inish button	
13. Try the EZ Connect software and the cor	nnection to the EZ Series In-Site CL panel.	

Problem: Windows Vista is giving a "driver not installed properly error".
Corrective Action: Make sure computer is connected to an internet connection. After it is connected, follow the steps below:
1. Click on
2. Click on Control Panel
3. Click on "System and Maintenance". System and Maintenance Get started with Windows Back up your computer
4. Click on "System". System View amount of RAM and processor speed
5. Click on Sevice Manager in the left menu bar, click (Must be logged into an Administrator Account).
6. Click on the Ports (COM & LPT) item to see if the USB Serial Port is installed. If it looks like the picture below (i.e. If there is a yellow exclamation on the device) continue to Step 7.
Ports (COM & LPT)
If the USB Serial Port cannot be found in the Ports (COM & LPT) looks like the picture below, contact supplier for more help dealing with this issue <b>Note:</b> The port number maybe different on your system, i.e. not COM3. This is o.k. and should not affect EZ Connect ability to communicate.
Ports (COM & LPT)
7. Right click the "USB Serial Port" and then left click on "Update Driver Software"
USB Serial Por Processors Storage controller System devices Uninstall Universal Serial Bu Scan for hardware changes Properties

roblem: Windows Vista is giving a "driver not installed properly error".	
orrective Action: Make sure computer is connected to an internet connection. After it is connected, follow the steps below:	
. Click "Browse my computer for driver software".	
Update Driver Software - USB Serial Port (COMB)	
How do you want to search for driver software?	
Search automatically for updated driver software Windows will search your computer and the Internet for the latest driver software	
tor your device.	
Browse my computer for driver software Locate and install driver software manually.	
Cancel	
<ul> <li>Select "include subfolders" and browse to the following location: Windows Vista - 32bit C:\Program Files\SJE Rhombus\EZ Connect\CDM20814_WHQL_Certified</li> <li>Windows Vista - 64Bit C:\Program Files (x86)\SJE Rhombus\EZ Connect\CDM20814_WHQL_Certified</li> </ul>	
Update Driver Software - USB Serial Port (COM3)	
Browse for driver software on your computer.	
Search for driver software in this location:	
gram Files/SIE Rhombus/EZ Connect/CDIM20816_WHQL_Certified - Browsen	
INclude Inductors	
Let me pick from a list of device drivers on my computer This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
Next	
0. Allow Windows to install the driver.	
Undate Driver Settoure - USB Serial Pert (COM3)	
Searching C:\rrogram Files\sst knombus\sz Connect\CDM20814_WHQL_Certified for software	
Cancel	
1. After the driver install is done, click the <b>Close</b> button.	
2. Try the EZ Connect software and the connection to the EZ Series In-Site CL panel.	

<b>Problem:</b> Windows 7 is giving a "driver not installed properly error". <b>Corrective Action:</b> Make sure computer is connected to an internet connection. After it is connected, follow the steps below:
1. Click on
2. Click on Control Panel
3. Click on "System and Security". System and Security Beck up your computer's status Back up your computer Find and fix problems
4. Click on "System". System View amount of RAM and processor speed
5. Click on 😵 Device Manager in the left menu bar. (Must be logged into an Administrator Account.)
6. Click on the <b>Other Devices</b> item to see if the USB Serial Port is installed. If it looks like the picture below (i.e. If there is a yellow exclamation on the device) continue to Step 7.
⊿ - 👔 Other devices IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
If the USB Serial Port cannot be found in the Other Devices and the Ports item looks like the picture below, Contact supplier for more help dealing with this issue <b>Note:</b> The port number maybe different on your system, i.e. not COM3. This is just fine and should not affect EZ Connect ability to communicate.
Ports (COM & LPT)
7. Right Click the "USB Serial Port" and then Left click on "Update Driver Software".
Serial Port (COM3)
Update Driver Software
a Disable
te
Scan for hardware changes
Properties
8. Click "Browse my computer for driver software ".
×
Update Driver Software - USB Serial Port (COM3)
How do you want to search for driver software?
Search automatically for updated driver software Windows will search your computer and the Internet for the Internet driver software for your device, unless you've disabled this feature in your device installation settings.
Browse my computer for driver software Locate and install driver software manually.
Cancel

Problem: Windows 7 is giving a "driver not installed properly error".
Corrective Action: Make sure computer is connected to an internet connection. After it is connected, follow the steps below:
<ol> <li>Select "include subfolders" and browse to the following location: Windows 7 - 32bit C:\Program Files\SJE Rhombus\EZ Connect\CDM20814_WHQL_Certified</li> </ol>
Windows 7 64Bit C:\Program Files (x86)\SJE Rhombus\EZ Connect\CDM20814_WHQL_Certified
Click Next.
Update Driver Software - USB Serial Port (COMB) Browse for driver software on your computer Search for driver software in this locations FranceConjust Formation Faceware (COMOULE (COMOU
10. Allow Windows to install the driver.
11. After the driver install is done, click the <b>Close</b> button.
12. Try the EZ Connect software and the connection to the EZ Series In-Site CL panel.



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