# User's Manual

# SL1000 Data Acquisition Unit Firmware Version Upgrade Procedure

# Foreword

This user's manual describes the procedure for recovery in the event that upgrading of the version of the SL1000 Data Acquisition Unit firmware using the SL1000 acquisition software failed.

# Disclaimers

Yokogawa will accept no responsibility for damage caused directly or indirectly as a result of use of the product.

# Preparation

### Installing the USB Driver

Check whether the USB driver is installed on the PC connected to the SL1000 Data Acquisition Unit. If not installed, refer to the SL1000 acquisition software user's manual to install the USB driver.

# Firmware Update Program (Recovery Folder)

A firmware update program is located in the Recovery folder that was included in the downloaded and decompressed file.

FirmwareDownloadApp.exe bootload.dll, tmctl.dll YKMUSB.dll, ymcompress.dll sl1000\_xxx.ymc (file for updating. xxx is the version number of the firmware.)

# Firmware Version Upgrade Procedure

- 1. Connect the SL1000 Data Acquisition Unit (hereinafter, the SL1000) to the PC with a USB cable.
- 2. Set the SERVICE switches on the SL1000 rear panel as indicated in the figure below.



3. Hold down the DISPLAY key on the front panel of the SL1000 while turning the power ON.
<< Update >> appears in the display. If it does not appear, check the SERVICE switches, then once again hold down the DISPLAY key while turning the power ON.

≪ Update ≫
BT Ver : 1.01 LKDate : 07 / 03 / 22  16 : 52 Boot OK.



#### Starting the Firmware Update Program (FirmwareDownloadApp)

**4.** Drag the sl1000\_xxx.ymc file in the Recovery folder onto FirmwareDownloadApp.exe (the firmware update program) located in the same folder. The Firmware Update Wizard starts.

	SL1000	- Fim	ware Update tool		
E	⊴it <u>V</u> iew	Help			
	TEMP01		Firmware Update	Wizard.	
			Please never pull ou button. Please select the equipm list box, and push "Down	t the USB code after pushing "Start ent that downloads the update file from a l load" button.	left
			Manufacturer: YOKOGAWA	Model: 720120	
			Serial No.: 0	System ROM: S1.80	
			Update file name:	C:/sl1000_2.03.ymc	1
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					1
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Re	ady				1.3

#### Performing the Firmware Update

5. Click the **Download** button. The update confirmation dialog box is displayed.

ĺ	Update confirmation dialog
	Do you really update it? Please push "OK" when you keep operating it.
	OK Cancel

Click the  $\ensuremath{\text{OK}}$  button. The firmware update executes.

Do not turn the power OFF or remove the USB cable until the download is complete.

Firmware Update Wizard.         Never drop the power supply, and never pull out the cable.         Transmitting:59.82% : /sdHd/00//pga/PCI.rbf         Manufacture: Y0K0GAWA       Model: 720120         Serial No: 0       System R0M: S1.80         Updete file neme:       p:/st1000_2.03.ymc			
Never drop the power supply, and never pull out the cable.         Transmitting:59.82% : /sdHd/00//pga/PCI.dbf         Manufacture: Y0KDGAWA       Model: 720120         Serial No: 0       System RDM: S1.80         Update: file name:       pr/date: file name:	TEMP01	Firmware Update	Wizard.
Transmitting:59.82%: /sdHd/00/fpga/PC1.bf         Manufacturer: Y0K0GAWA       Model: 720120         Serial No: 0       System R0M: S1.80         Update file name:       p:/st1000_2.03.ymc		Never drop the powe	r supply, and never pull out the cable.
Manufacture: Y0K0GAWA       Model: 720120         Serial No.: 0       System R0M: S1.80         Update file name:       p://st1000_2.03.ymc		Transmitting:59.82%:/sc	Hd/00/fpga/PCI.rbf
Serial No.: 0 System ROM: S1.80		Manufacturer: YOKOGAWA	Model: 720120
Update file name: <u>5./st1000_2.03.ymc</u>		Serial No.: 0	System ROM: S1.80
		Update file name:	C:/sl1000_2.03.ymc

#### Exiting the Firmware Update

6. If the update finishes normally, the screen below is displayed. Click the Exit button.

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E <u>x</u> it ⊻iew <u>H</u> elp		
TEMP01	Firmware Update	Wizard.
	Normal termination.	
	Success Update.	
	Manufacturer: YOKOGAWA	Model: 720120
	Serial No.: 0	System ROM: S1.80
	Update file name:	C:/sl1000_2.03.ymc
		Back
Ready		

#### **Restarting the SL1000**

**7.** Turn OFF the power to the SL1000. Return the SERVICE dip switches on the rear panel of the SL1000 to their original positions as shown in the figure below, then turn the power to the SL1000 ON again.





# **Checking the Firmware Version**

- 1. Start the SL1000 acquisition software.
- **2.** Open the Self Test screen from the **Environment** menu, then click the Unit Info tab. The SL1000's firmware, FPGA, and module information is displayed.
- 3. Check the version of the updated firmware.

	F2.03			— Firmware versi
ACQ	1.1.13			
PCI	1.1.46			
701251	0x00			
701250	OxFF			
701250	OxFF			
701250	OxFF			
701250	UXFF			
701250	OVEE			
701250	OxFF			
	ACQ PCI 701251 701250 701250 701250 701250 701250 701250	ACQ 1.1.13 PCI 1.1.46 701251 0x00 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF	ACQ 11.13 PCI 1.1.46 701251 0x00 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF	ACQ 1.1.13 PCI 1.1.46 701251 0x00 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF 701250 0xFF