Utility Software Data Connection 70S 70R 19S 19R Instruction Manual

Please read this instruction manual carefully before installation.



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1. Introduction

Data Connection 70S 70R 19S 19R ("Data Connection") is the software included in the package of 70S/70R/19S/19R, the splicer series manufactured by Fujikura.

Read this installation manual before installing Data Connection

2. System Requirements

Computer and processor	1.6 gigahertz(GHz) processor or higher
	(In case Core [™] i3, Intel Corp)
Operating System	Microsoft Windows Vista SP2 (32bit)
	Microsoft Windows 7 SP1 (64bit / 32bit)
	Microsoft Windows 8
	*The operating system must be updated by
	Windows Update
Memory	2GB (Windows Vista SP2)
	4GB (Windows 7 SP1, Windows 8)
Hard Disk	100MB available space
Drive	CD-ROM or DVD drive
Display	1024x768, or higher resolution
	24bit, or higher color
Other	USB 2.0 Port
	Capable of Internet Access, 56kbps or higher
	Broadband access is recommended

3. Install

P

Login to the PC using an account with administrator privilege

Administrator privilege is required when installing the software.

If you do not have an account which has administrator privilege, ask the supervisor of the PC for installation.

Exit all programs running on the PC

Exit all programs running on the PC. Some programs may prevent installation. Specifically do not install Data Connection when the communication software for another series of splicer is running.

Perform Windows Update or Microsoft Update

Operating System must be updated by latest update.

Perform Windows Update or Microsoft Update before starting installation. To go to Windows Update or Microsoft Update, select [Start] > [All Programs] > [Windows Update] or [Microsoft Update].



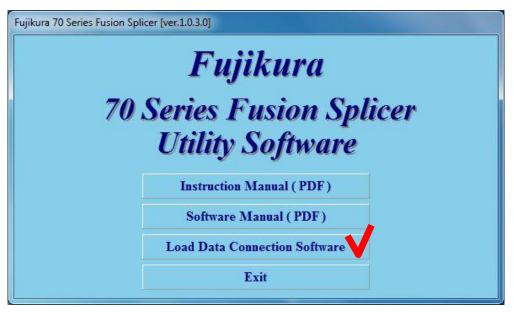
Internet connection is necessary in order to perform Windows Update or Microsoft Update.

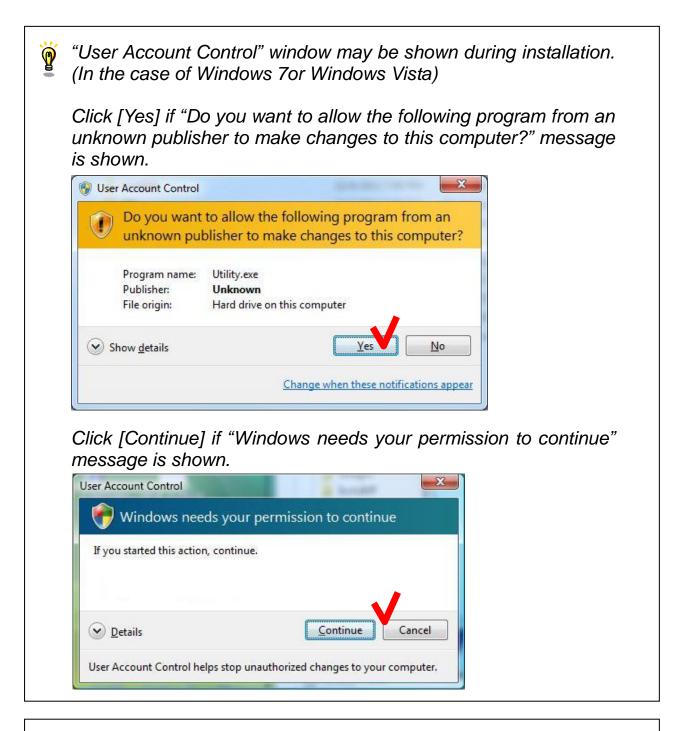
4. Install the Software

- (1) Confirm that the USB cable is not connected.
- (2) Insert the instruction CD into CD-ROM or DVD drive.
- (3) After a few seconds, instruction menu will be shown automatically. If the menu is not shown, double-click "Utility.exe" which is in the root of the instruction CD.

Name	Date modified
📕 DotNetFx	12/4/2012 7:59 PM
🌗 manual	12/4/2012 7:59 PM
퉳 vcredist	12/4/2012 7:59 PM
鷆 хб4	12/4/2012 7:59 PM
🍌 x86	12/4/2012 7:59 PM
📄 Installer.exe	11/29/2012 2:12 PM
🌏 Utility.exe	11/28/2012 11:22
Installer.exe.manifest	5/20/2009 5:17 PM
Utility.exe.manifest	5/20/2009 5:18 PM
autorun.inf	10/13/2012 4:23 PM
📄 install.txt	11/29/2012 8:07 PM

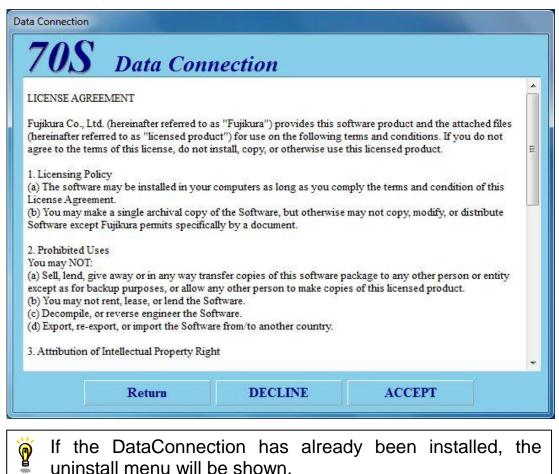
(4) Click the [Load Data Connection Software] button.







(5) License Agreement confirmation window will be shown. Click the [ACCEPT] button if you accept the License Agreement. If you do not accept the License Agreement, click the [DECLINE] button. In this case, installation will be cancelled.



(6) Installation of necessary software and driver will start.

Necessary software and driver for Data Connection

- Microsoft .NET Framework 4 Client Profile
- Microsoft Visual C++ 2010 Redistributable
- •Usb Driver

(a) Installation of Microsoft .NET Framework 4 Client Profile

If "Microsoft .NET Framework 4 Client Profile" has not been installed, [Microsoft .NET Framework 4 Client Profile Setup] window will be shown.

If the installation is not necessary, the following window will not be shown. Proceed to following page

Check [I have read and accept the license terms] and click the [Install] button.

🔸 Microsoft .NET Framework 4 Cl	ient Profile Setup	
.NET Framework 4 Client Profi Please accept the license tern		Microsoft
MICROSOFT So		
Download size estimate: Download time estimates:	0 MB Dial-Up: 0 minutes Broadband: 0 minutes	
		Instal

When the following window is shown, click the [Finish] button to complete the installation.

Microsoft .NET Framework 4 Client Profile Setup		
Microsoft* .NET	Installation Is Complete	
	Check for more recent versions on <u>Windows Update</u> .	
	Finish	

(b) Installation of Microsoft Visual C++ 2010 Redistributable

If "Microsoft Visual C++ 2010 Redistributable" has not been installed, [Microsoft Visual C++ 2010 Redistributable Setup] window will be shown.

If the installation is not necessary, following window will not be shown. Proceed to following page

Check the [I have read and accept the license terms] and click the [Install] button.

Microsoft Visual C++ 2010 x86 Redistributable Setup
Welcome to Microsoft Visual C++ 2010 x86 Redistributable Setup Please, accept the license terms to continue.
MICROSOFT SOFTWARE LICENSE TERMS
I have read and accept the license terms.
Yes, send information about my setup experiences to Microsoft Corporation.
For more information, read the <u>Data Collection Policy</u> .
Instal Cancel

When the following window is shown, click the [finish] button to complete the installation.



(c) Uninstallation of existing USB driver

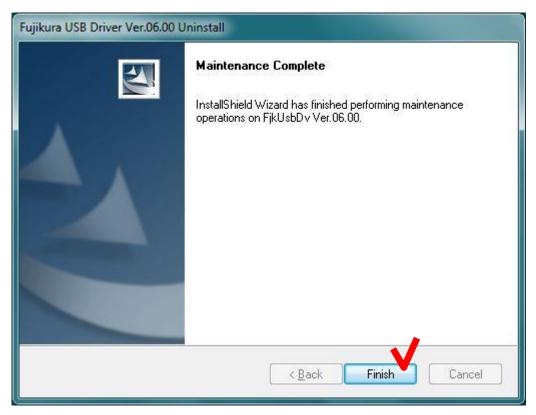
If the old version of USB driver has been installed, [Confirm Uninstall] window will be shown.

If the uninstallation is not necessary, the following window will not be shown. Proceed to following page

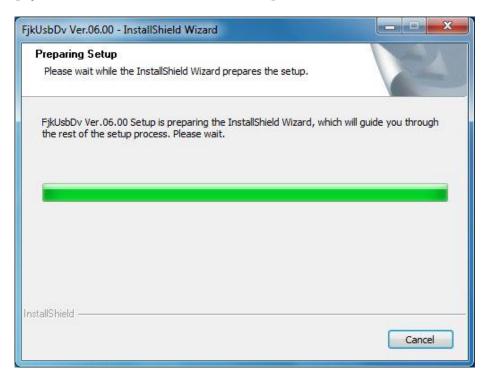
Click the [OK] button.

Confirm Uninstall	×
Do you want to completely remove the sele	ected application and all of its features?
	OK Cancel

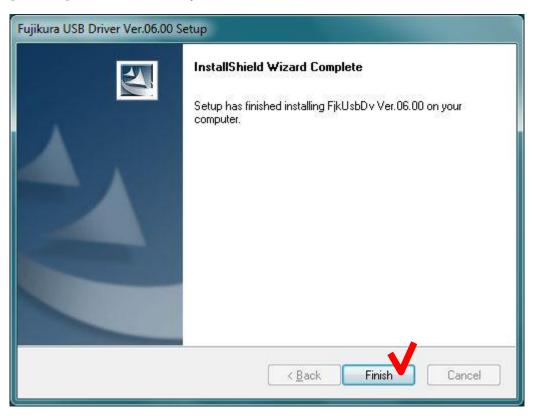
When the following window is shown after the uninstallation, click the [finish] button to complete the uninstallation.



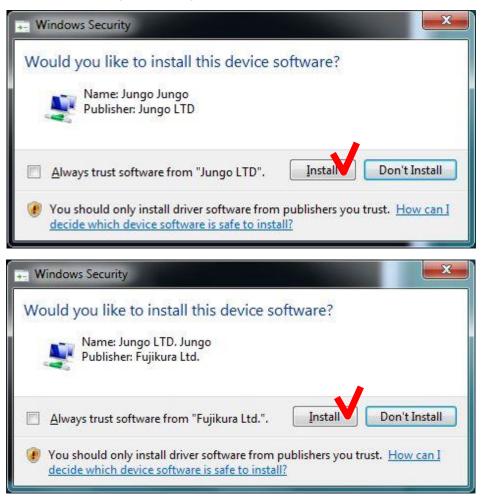
(d) Installation of USB driver [FjkUsbDv InstallShield Wizard] window will be shown.



When the following window is shown after the installation, click the [Finish] button to complete the installation.



If the following message is shown, click the [Install] button.



If the following security message was shown, click "Install this driver software anyway".



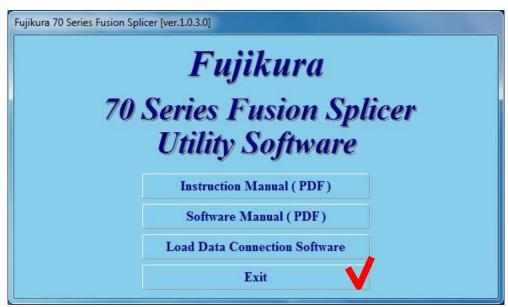
(7) Installation of the main program of Data Connection will start. During the installation, the following message is shown.



(8) When the following message is shown, click the [OK] button to complete the installation.



(9) Click the [Exit] button to close the menu.



(10) Install device driver.

P

Turn on the splicer and connect to the PC with USB cable.

"Installing device driver software" message will be shown at notification area in task bar.



When the driver installation is complete, "Device driver software installed successfully" message will be shown.



If the "Device driver software installed successfully" message was not shown in a few minutes, please read [Installation of the Device Driver Failed] in [Chapter 7: Troubleshooting]

5. How to use the Data Connection 70S 70R 19S 19R

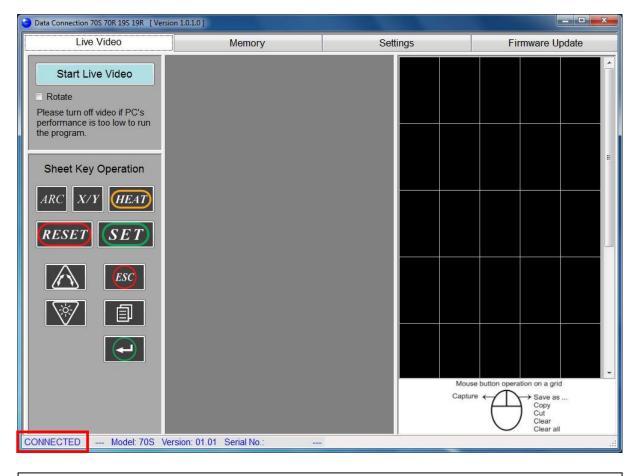
Double-click the shortcut on the desktop or click "Data Connection 70S 70R 19S 19R" in the [Start] > [All Programs] > [Fujikura] menu.



If the Data Connection does not run, please read [Data Connection Does Not Run] in [Chapter 7: Troubleshooting].

Turn on the splicer and connect to PC with USB cable.

If the USB communication is ready, "CONNECTED" message will be shown at the bottom left of Data Connection window.



If the "CONNECTED" message was not shown, please read [USB Communication Does Not Works] in [Chapter 7: Troubleshooting]

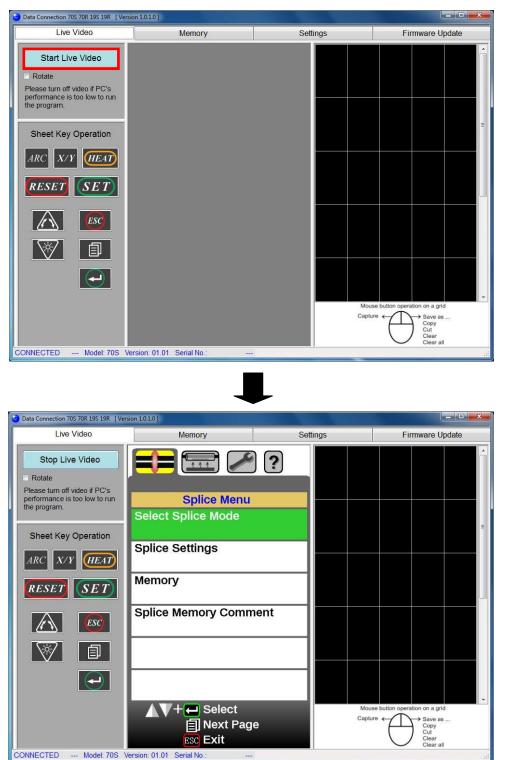
5.1. Real-time Control

In the [Live Video] page, real-time video image can be displayed and captured. And sheet keys on the splicer can be operated by PC buttons.

5.1.1. Display the Real-time Video

(1) Select the [Live Video] page, and click the [Start Live Video] button to start video.

(Then the label of button will be changed to [Stop Live Video])



(2) If the video image is displayed upside down because of monitor position of the splicer, check [Rotate] to rotate the video image.

Data Connection 70S 70R 19S 19R [Versel]	sion 1.0.1.0]		
Live Video	Memory	Settings	Firmware Update
Stop Live Video		?	
performance is too low to run the program.	Splice Menu		
the program.	Select Splice Mode		
Sheet Key Operation			E.
ARC X/Y HEAT	Splice Settings		
RESET SET	Memory		
	Splice Memory Comn	nent	
\bigcirc			
	V+ 🔁 Select		use button operation on a grid
	🗐 Next Pag	e	Save as Copy Cut
	ESC Exit		Clear Clear all
CONNECTED Model: 70S V	/ersion: 01.01 Serial No.:	-	

(3) To stop live video, click the [Stop Live Video] button.(Then the label of button will be changed to [Start Live Video])

Data Connection 70S 70R 19S 19R [Vers	sion 1.0.1.0]		
Live Video	Memory	Settings	Firmware Update
Stop Live Video)?	
Please turn off video if PC's performance is too low to run the program.	Splice Menu Select Splice Mode		
Sheet Key Operation ARC X/Y IEAT	Splice Settings		
RESET SET	Memory		
	Splice Memory Comm	lent	
			Ŧ
	▲▼+ ← Select		se button operation on a grid re Save as Copy Cut Clear Clear all
CONNECTED Model: 70S V	ersion: 01.01 Serial No.:		

5.1.2. Caputure the Live Video Image

- (1) Click the [Start Live Video] button to start live video.
- (2) Click the grid on right side of window. The live video image will be captured to clicked grid.

Data Connection 705 70R 19S 19R [Vers	ion 1.0.1.0]		
Live Video	Memory	Settings	Firmware Update
Stop Live Video Rotate Please turn off video if PC's		Public Menary Connect	
performance is too low to run the program.	Maintenance	AVerstage ⊆ cut tage ⊂ cut	
the program.	Maintenance Menu		
Sheet Key Operation			
ARC X/Y HEAT	Machine Settings		
RESET SET	Supervisor Menu		
V (1			
\bigcirc			
	▲▼+ ← Select		Copy Cut Clear Clear all
CONNECTED Model: 70S V	ersion: 01.01 Serial No.:		

(3) The functions shown at following table can be performed to the captured image. Right-click the captured image to show the menu, and select the operation.

Patien Norm: Intel Patien Mode	Rabiterume Rabiterume Menu			
pilce settinge	machine Settings			
lenery Johon Moreory Comment	Supported Mare			
AY+- deent Ened ruge Con	100 100 100 100 100 100 100 100 100 100	Save as Copy Cut Clear Clear all		

Menu	Operation	
Save As Save the selected image as .jpg file.		
Сору	Copy the selected images to clipboard.	
Cut	Copy the selected images to clipboard and clear the image from DataConnection.	
Clear Clear the selected image from DataConnection.		
Clear All Clear all images from DataConnection.		

5.1.3. Operate the Sheet Key(1) Select the [Live Video] page, and click the button which you want to operate in [Sheet Key Operation] panel.

Data Connection 705 70R 195 19R [Versi	on 1.0.1.0]		
Live Video	Memory	Settings	Firmware Update
Stop Live Video		?	
Please turn off video if PC's performance is too low to run	Splice Menu		
the program.	Select Splice Mode		
Sheet Key Operation			E.
	Splice Settings		
ARC X/Y HEAT			
RESET SET	Memory		
ESC	Splice Memory Comm	nent	
1			
$\mathbf{\mathbf{e}}$			
	▲V+ 🛏 Select	Mor	vuse button operation on a grid
	Next Pag		ure Copy
			Cut Clear Clear all
CONNECTED Model: 70S Ve	ersion: 01.01 Serial No.:		i i i i i i i i i i i i i i i i i i i

5.2. Splice Result Memory

In the [Memory] page, the splice result memory and images may be downloaded and saved.

Splice result memory data can only be downloaded from the splicer. (Splice results cannot be uploaded to the splicer.)

5.2.1. Splice Results

5.2.1.1 Download Splice Result Memory

(1) Confirm that the splicer is in the "READY" state.

```
Press the [RESET] key to set the splicer to the "READY" state.
```

(2) Select the [Memory] page, and click the [Download All Memories] button to download all stored splice results.



<u>NOTES</u>

To download ALL splice result memories:

Click the [Download All Memories] button

To download **ONLY** a specified selection of splice result memories: Input the desired [Start No.] and [End No.], then click the [Download] button.

(In the picture above, results from No.1 to No.200 will be downloaded.)

5.2.1.2 Save Splice Result Memory

(1) Click [Save File] or [Save As .XLS] button to save the splice result memories.

Live Video		Memory		Settings		Firmware Update	
Splice Result		Camera Image					
Memory No.	Comment	Date	Fiber Type	Mode Title 1	Mode Title 2	Loss	Core Offse
No.1		2015-06-11 09:00:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.2		2015-06-11 09:10:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.3		2015-06-11 09:20:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.4		2015-06-11 09:30:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.5		2015-06-11 09:40:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.6		2015-06-11 09:50:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.7		2015-06-11 10:00:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.8		2015-06-11 10:10:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.9		2015-06-11 10:20:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.10		2015-06-11 10:30:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.11		2015-06-11 10:40:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.12		2015-06-11 10:50:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.13		2015-06-11 11:00:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.14		2015-06-11 11:10:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.15		2015-06-11 11:20:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.16		2015-06-11 11:30:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.17		2015-06-11 11:40:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.18		2015-06-11 11:50:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.19		2015-06-11 12:00:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.20		2015-06-11 12:10:00	SM AUTO	AUTO		0.01 dB	0.0 µ
No.21		2015-06-11 12:20:00	SM AUTO	AUTO		0.01 dB	0.0 µ
	m					0.04.45	
			-	S	tart No. 1	No. 200	Download
		Download All Memories	Open	File	Save File	Save	e As . XLS

[Save File]

Data is saved to a file. Only Data Connection can open this data file.

[Save As .XLS]

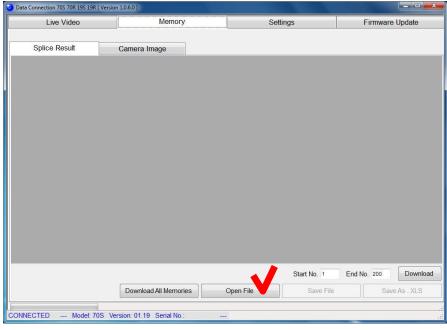
Data is exported as XLS file so that the data can be opened by Microsoft Excel. Note that Data Connection cannot open this exported file.

5.2.1.3 Open Splice Result Memory Data

Pris function is available without USB connection.

Splice result memory data cannot be opened when a different model of splicer is connected.

Select the [Memory] page, and click the [Open File] button. When the file open dialog is shown, select the saved file.





Live Video		Memory	Memory Settings			s Firmware Upda	
Splice Res	ult	Camera Image					
Memory No.	Comment	Date	Fiber Type	Mode Title 1	Mode Title 2	Loss	Core Offs
No.1		2015-06-11 09:00:00	SM AUTO	AUTO		0.01 dB	0.0
No.2		2015-06-11 09:10:00	SM AUTO	AUTO		0.01 dB	0.0
No.3		2015-06-11 09:20:00	SM AUTO	AUTO		0.01 dB	0.0
No.4		2015-06-11 09:30:00	SM AUTO	AUTO		0.01 dB	0.0
No.5		2015-06-11 09:40:00	SM AUTO	AUTO		0.01 dB	0.0
No.6		2015-06-11 09:50:00	SM AUTO	AUTO		0.01 dB	0.0
No.7		2015-06-11 10:00:00	SM AUTO	AUTO		0.01 dB	0.0
No.8		2015-06-11 10:10:00	SM AUTO	AUTO		0.01 dB	0.0
No.9		2015-06-11 10:20:00	SM AUTO	AUTO		0.01 dB	0.0
No.10		2015-06-11 10:30:00	SM AUTO	AUTO		0.01 dB	0.0
No.11		2015-06-11 10:40:00	SM AUTO	AUTO		0.01 dB	0.0
No.12		2015-06-11 10:50:00	SM AUTO	AUTO		0.01 dB	0.0
No.13		2015-06-11 11:00:00	SM AUTO	AUTO		0.01 dB	0.0
No.14		2015-06-11 11:10:00	SM AUTO	AUTO		0.01 dB	0.0
No.15		2015-06-11 11:20:00	SM AUTO	AUTO		0.01 dB	0.0 μ
No.16		2015-06-11 11:30:00	SM AUTO	AUTO		0.01 dB	0.0
No.17		2015-06-11 11:40:00	SM AUTO	AUTO		0.01 dB	0.0
No.18		2015-06-11 11:50:00	SM AUTO	AUTO		0.01 dB	0.0
No.19		2015-06-11 12:00:00	SM AUTO	AUTO		0.01 dB	0.0
No.20		2015-06-11 12:10:00	SM AUTO	AUTO		0.01 dB	0.0
No.21		2015-06-11 12:20:00	SM AUTO	AUTO		0.01 dB	0.0
_ · · [m	0045 00 44 40.00.00				0.04.45	
		Developed All Menories		1		d No. 200	Downloa
		Download All Memories	Oper	File	Save File	Sav	e As . XLS
	Comple	ted					

5.2.2. Camera Images

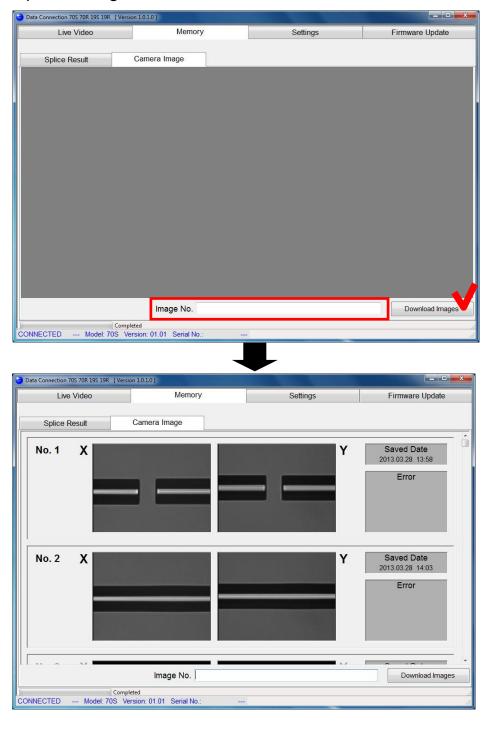
Ø

5.2.2.1 Download Camera Images

(1) Confirm that the splicer is in "READY" state.

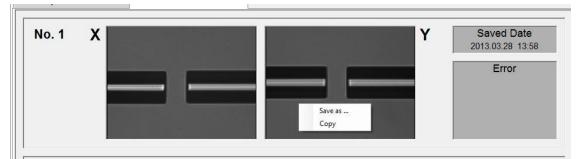
Press the [RESET] key to set the splicer to the "READY" state.

(2) Select the [Camera Image] tab in the [Memory] page, and click the [Download Images] button. Input such as "1-10", "1,3,5" into [Image No.] textbox to download specified images. To download all images, input nothing here.



5.2.2.2 Save Images

(1) Right-click the image to show the menu and select the operation.



[Save As ...]

Save the selected image as .jpg file.

[Copy]

Copy the selected image to clipboard.

5.3. Download, Save, Edit and Upload Settings

In the [Settings] page, the splice settings can be downloaded, saved, edited and uploaded. The [Setting] page consists of 3 additional pages. Please note that some items are displayed on the page which is different from splicer.

Item	Page in Splicer	Page in Data Connection
Splice Mode	Splice Menu	Splice Mode Settings
Heater Mode	Heater Menu	Heater Mode Settings
Splice Settings	Splice Menu	
Splice Memory Comment	Splice Meriu	
Auto Cover Open	Heater Menu	Other Settings
Machine Settings	Maintenance	
Supervisor Menu	Indinterialice	

5.3.1. Download Settings

Confirm that the splicer is in "READY" state.

Press the [RESET] key to set the splicer to the "READY" state.

Select the [Settings] page.

1 Connection 705 70K 155 15K	[Version 1.0.1.0]					-
Live Video	Memory		Settings	;	Firmware Up	date
plice Mode Settings	Upster Made Cottings	Other Cettin				
plice wode detailigs	Heater Mode Settings	Other Settin	ys			
				The second second	Linkard	Daumla
		S	Start No. 1	End No. 100	Upload	Downlo
Upload All Settir	ngs Download All Setting:			End No. 100 Save File	Upload Save A	Downlo

Download all of [Splice Mode Settings], [Heater Mode Settings] and [Other Settings]

Click the [Download All Settings] button

Download one of [Splice Mode Settings], [Heater Mode Settings] and [Other Settings]

Select page you want to download, and click the [Download] button. (In the picture above, [Splice Mode Settings] will be downloaded.)

In [Splice Mode Settings] and [Heater Mode Settings] page, you can select the mode number to download specifying [Start No.] and [End No.].

5.3.2. Save Settings

Click [Save File] or [Save As .XLS] button to save the settings. When file save dialog is shown, input file name and destination.

Live Video	Memor	nory Se			Firmware Update	
Splice Mode Settings	Heater Mode Settings	Other Se	ettings			
	No.1	No.2	No.3	No.4	No.5	1
Fiber Type	AUTO 🔫	SM AUTO -	MM AUTO 🔫	NZ AUTO 🔫	DS AUTO 🔫	10
Mode Title 1	AUTO	SM AUTO	MM AUTO	NZ AUTO	DS AUTO	
Mode Title 2	SM/NZ/DS/MM					
AUTO/FAST Mode						
Rearc Time [ms]	800	800	800	800	800	
Cleaning Arc [ms]	150	150	150	150	150	
Arc Power [bit]	AUTO	AUTO	AUTO	AUTO	AUTO	
Arc Time [ms]	AUTO	AUTO	AUTO	AUTO	AUTO	
Cleave Angle Limit [°]	3.0	3.0	5.0	1.5	1.5	
Cleave Shape Error	NORMAL -	NORMAL -	NORMAL -	NORMAL -	NORMAL -	1
Fiber Angle Limit [°]	1.0	1.0	2.0	1.0	1.0	
Loss Limit [dB]	0.20	0.20	0.20	0.20	0.20	
Standard Mode						
Rearc Time [ms]						
Cleaning Arc [ms]						
Gap [µm]						
Gapset Position [µm]						
Focus-L						
Focus-R						
Align						
ECF						
					255.	1
			Start No. 1	End No. 100	Upload Dow	nload
Upload All Setting	gs Download All Setti	ngs Oj	pen File	Save File	Save As . X	as
1	Completed					_

[Save File]

Data is saved to a file. Only Data Connection can open this data file.

[Save As .XLS]

Data is exported as XLS file so that the data can be opened by Microsoft Excel. Note that Data Connection cannot open this exported file.

5.3.3. Open Settings Data

This function is available without USB connection.

Select the [Settings] page and click the [Open File] button. When file open dialog is shown, select the saved file.

Data Connection 70S 70R 19S 19R	[Version 1.0.1.0]			
Live Video	Memory	Se	ttings	Firmware Update
Splice Mode Settings	Heater Mode Settings	Other Settings		
-				
		Start No. 1	End No. 100	Upload
Upload All Settin	Download All Settings	Open File	Save File	Save As . XLS
CONNECTED Model: 70	0S Version: 01.01 Serial No.:			

5.3.4. Edit Settings

Click the cell to edit.

There are specific methods to change the setting. Follow the Data Connection display to change the setting.

When the value of "Fiber Type" is changed, all parameters in the selected mode will be reset to original factory values.

When the value of "Sleeve Type" is changed, all parameters in the selected mode will be reset to original factory values.

(a) Select item from list.

	Cleaning Arc [ms]	190	100
	Arc Power [bit]	AUTO	AUTO
	Arc Time [ms]	AUTO	AUTO
	Cleave Angle Limit [°]	3.0	3.0
•	Cleave Shape Error	NORMAL -	NORMAL -
	Fiber Angle Limit [°]	OFF	1.0
	Loss Limit [dB]	ROUGH	0.20
	Standard Mode	NORMAL	
	Rearc Time [ms]	FINE	
	Cleaning Arc [ms]		
	Ann Anna		

(b) Change value with bar.

	Cleaning Arc [ins]		50	100	
	Arc Power [bit]	AUT	ТО	AUTO	
	Arc Time [ms]	AUT	ТО	AUTO	
•	Cleave Angle Limit [°]	3	3.0		
	Cleave Shape Error	NORMAL	T	NORMAL 🚽	
	Fiber Angle Limit [°]	1	1.0	1.0	
	Loss Limit [dB]	[dB] 0.20		0.20	
	Standard Mode				
	Rearc Time [ms]				
	Cleaning Are Imcl		10		



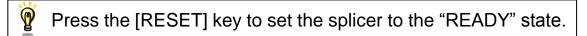
(c) Input with keyboard directly.

		Houtor mode of	Outor	
		No.1	No.1	
	Fiber Type	AUTO	-	SM AUTO 🔫
	Mode Title 1	AUT	AUTO	
•	Mode Title 2	SM/NZ/DS/N	A M	
	AUTO/FAST Mode			
	Rearc Time [ms]	8	00	800
	Cleaning Arc [ms]	1	50	150
	Arc Power [hit]	A111	0	AUTO

5.3.5. Upload Settings

@

Confirm that the splicer is in "READY" state.



<u>Upload all of [Splice Mode Settings], [Heater Mode Settings] and [Other Settings]</u>

Click the [Upload All Settings] button

<u>Upload one of [Splice Mode Settings], [Heater Mode Settings] and [Other Settings]</u>

Select the page you want to upload, and click the [Upload] button. (In the following picture, only [Splice Mode Settings] will be uploaded.)

Live Video	Memo	ory	Setting	js	Firmware Updat	ware Update	
Splice Mode Settings	Heater Mode Settings	Other Se	attinge				
opiloo modo ooanigo	No.1	No.2		No.4	No.5	r	
			No.3	NO.4		5	
Fiber Type Mode Title 1		SM AUTO + SM AUTO	MM AUTO - MM AUTO	NZ AUTO V	DS AUTO - DS AUTO	19	
Mode Title 1 Mode Title 2	SM/NZ/DS/MM	SIVIAUTO	IVIN AUTO	NZAUTO	DSAUTO		
AUTO/FAST Mode	SIVI/NZ/DS/IVIIVI	2		ġ	× .		
	800	800	800	800	800		
Rearc Time [ms]	150	150	150	150	150		
Cleaning Arc [ms]	AUTO	AUTO	AUTO	AUTO	AUTO		
Arc Power [bit]	AUTO	AUTO	AUTO	AUTO	AUTO		
Arc Time [ms]	3.0	3.0	5.0	1.5	1.5		
Cleave Angle Limit [°]	NORMAL -	NORMAL -	NORMAL -	NORMAL +	NORMAL -		
Cleave Shape Error	1.0	1.0	2.0	1.0	1.0	1	
Fiber Angle Limit [°]	0.20	0.20	0.20	0.20	0.20		
Loss Limit [dB] Standard Mode	0.20	0.20	0.20	0.20	0.20		
Rearc Time [ms]	-						
Cleaning Arc [ms]	-				(c		
Gap [µm]	-						
Gapset Position [µm] Focus-L							
Focus-L Focus-R	-						
Align ECF	-						
			Start No. 1	End No. 100	Upload	nload	
Upload All Settin	gs Download All Se	ttings	pen File	Save File	Save As . 2	XLS	
	Completed						

In [Splice Mode Settings] or [Heater Mode Settings] page, you can select the mode number to upload specifying the [Start No.] and [End No.]

5.4. Firmware Update

The [Firmware Update] page provides firmware update function of the splicer.

When the PC is connected to internet, DataConnection downloads firmware update file from our server and installs it to the splicer.

Otherwise, if you have the firmware update file, the firmware can be installed to splicer using Data Connection without internet connection.

Data Connection 70S 70R 19S 19R [Versio	n 1.0.1.0]			
Live Video	Memory		Settings	Firmware Update
Installing		nware relea	sed on the inter	net site
[1]	Version	Updated	Size	
	01.02	2013-03-15	3751 KB	
[2] Check	the firmware information a	automatically	Check the firmware informat	ion [3]
	Download	and install lates	st firmware	
Ins	stalling the fir	mware usir	ng an update file	
	Instal	l using an upda	te file	
	The update	if the PC cannot acc file is necessary for tact distributor to get	this function.	
CONNECTED Model: 70S Ver	rsion: 01.01 Serial No.:			ai.

[1] Information of latest firmware

- [2] Checkbox to enable check of the firmware information at logon. When the information is updated, message will be shown.
- [3] Button to check the firmware information.

5.4.1. Install the Latest Firmware Released on the Internet

During firmware installation,

- Do not turn off the splicer.
 - Do not disconnect USB cable.
- (1) Confirm the following

P

- The splicer is connected to PC with USB cable.
- The splicer is in "READY" state.
- The PC is connected to Internet.
- (2) Select the [Firmware Update] page, and click the [Download and install latest firmware] button.

Data Connection 70S 70R 19S 19R [Version	1.0.1.0]							
Live Video	Memory		Settings	Firmware Update				
Installing the latest firmware released on the internet site								
	Version	Updated	Size					
	01.02	2013-03-15	3751 KB					
Check the firmware information automatically Check the firmware information								
Download and install latest firmware								
Installing the firmware using an update file								
	Install using an update file							
Use this function if the PC cannot access to the Internet. The update file is necessary for this function. Please contact distributor to get update file.								
CONNECTED Model: 70S Ver	sion: 01.01 Serial No.:							

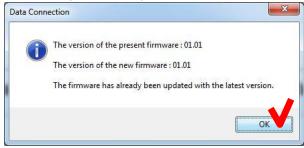
If the update file cannot be downloaded, "Connect the PC to the internet" message will be shown. In this case, confirm the internet connection using web browser.

If the message is shown despite the PC can access the internet, the firewall of network system may block downloading the file. Please consult the administrator of your network system.

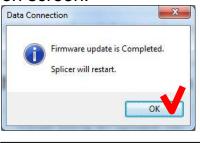
(3) Firmware update will start, and status bar at bottom left of Data Connection will progress.

Data Connection 70S 70R 19S 19R [Versio	n 1.0.1.0]					
Live Video	Memory		Settings	Firmware Update		
Installing		mware relea	ased on the internation	net site		
	Version	Updated	Size			
	01.02	2013-03-15	3751 KB			
Check	on					
Download and install latest firmware						
Ins	talling the fi	rmware usi	ng an update file			
	Install using an update file					
Use this function if the PC cannot access to the Internet. The update file is necessary for this function. Please contact distributor to get update file.						
Upgradi	ng Firmware					
CONNECTED						

If the latest firmware has already been installed to the splicer, the following message will be shown and firmware will not updated.



(4) When the following message is shown, click the [OK] button to finish the update. Confirm that the splicer restarts and "READY" state is indicated on screen.



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If the firmware update failed, the following problem will occur • The splicer cannot be turned on.

- (The splicer does not restart after firmware update)
- "READY" state is not indicated on screen although the splicer is turned on.

When above problem occurs, please read [Installation of Firmware Failed] in [Chapter 7: Troubleshooting]

5.4.2. Install the Firmware Using an Update File

- During firmware installation,
- Do not turn off the splicer.
 - Do not disconnect USB cable.
- (1) Confirm the following

Ø

- The splicer is connected to PC with USB cable.
- The splicer is in "READY" state.
- (2) Select the [Firmware Update] page, and click the [Install using an update file] button.

Data Connection 705 70R 19S 19R [Ve	rsion 1.0.1.0]			
Live Video	Memory		Settings	Firmware Update
Installin		mware relea	sed on the inte	ernet site
	Version	Updated	Size	
	01.02	2013-03-15	3751 KB	
☑ Che	ck th <mark>e</mark> firmware information	n automatically	Check the firmware infor	mation
	Downloa	d and install late	st firmware	
lı	nstalling the fi	irmware usii	ng an update fi	le
	Inst	all using an upda	te file	
	The upda	on if the PC cannot according the PC cannot according the secessary for ontact distributor to get	his function.	

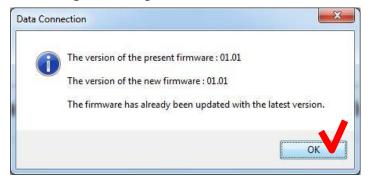
(3) When file open dialog is shown, select the update file.

Organize 👻 New f	older) 111 •	· 🔳 (
🔆 Favorites 📃 Desktop	^	Documents library Includes: 2 locations		Arrange by:	Folder 🔻
Downloads		Name		Date modified	Туре
📃 Recent Places	ш	70SR_0102.fju		1/23/2015 8:59 AM	FJU File
🥽 Libraries					
Documents					
J Music					
Pictures					
Videos					
Computer	+ -		II.		

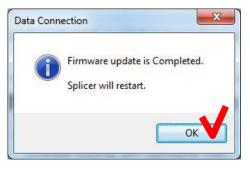
(4) Firmware update will start, and status bar will progress.

Live Video	Memory		Settings	Firmware Upda
Installin	g the latest fi	rmware releas	ed on the interr	net site
	-	irmware informati		
	Version	Updated	Size	
	01.02	2013-03-15	3751 KB	
⊡ Che	ck the firmware informati	on automatically	Check the firmware information	n
	Downlo	ad and install latest	firmware	
lı		firmware using	g an update file e file	
		ion if the PC cannot acces late file is necessary for th	is function.	

If the latest firmware has already been installed to the splicer, the following message will be shown and firmware will not updated.



(5) When the following message is shown, click the [OK] button to finish the update. Confirm that the splicer restarts and "READY" state is indicated on screen.



P

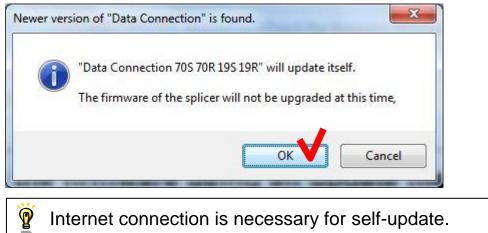
If the firmware update failed, the following problem will occur • The splicer cannot be turned on.

- (The splicer does not restart after firmware update)
- "READY" state is not indicated on screen although the splicer is turned on.

When above problem occurs, please read [Installation of Firmware Failed] in [Chapter 7: Troubleshooting]

5.5. Update Data Connection

Data Connection has self-update feature. If the following message is shown when Data Connection is starting, click the [OK] button to start updating Data Connection.



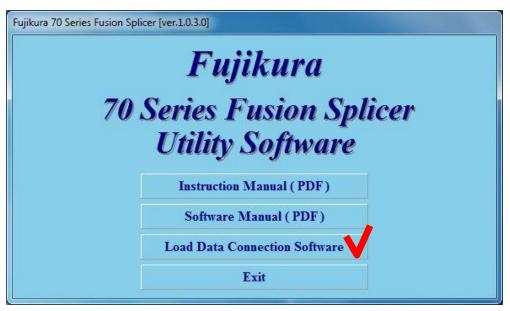
6. Uninstall the Data Connection

- (1) Confirm that the USB cable is not connected.
- (2) Insert the instruction CD into CD-ROM or DVD drive.
- (3) After a few seconds, instruction menu will be shown.If the menu is not shown, double-click "Utility.exe" which is in the root of

the instruction CD.

Name	Date modified
📕 DotNetFx	12/4/2012 7:59 PM
퉬 manual	12/4/2012 7:59 PM
퉳 vcredist	12/4/2012 7:59 PM
🍶 хб4	12/4/2012 7:59 PM
퉳 x86	12/4/2012 7:59 PM
Installer.exe	11/29/2012 2:12 PM
🜏 Utility.exe	11/28/2012 11:22
] Installer.exe.manifest	5/20/2009 5:17 PM
Utility.exe.manifest	5/20/2009 5:18 PM
autorun.inf	10/13/2012 4:23 PM
install.txt	11/29/2012 8:07 PM

(4) Click the [Load Data Connection Software] button.



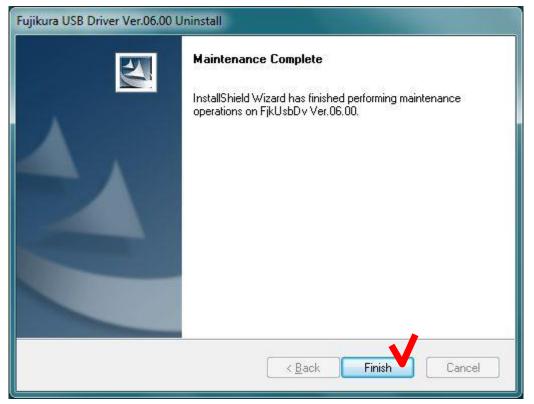
(5) When the following window is shown, click the [Uninstall] button.

ta Connection 70S Data Co	onnection	
	Uninstallation	
USB Driver Data Connection	Installed(ver 06.00)Installed(ver 1.0.1.0)	
	Uninstall	
	Exit	

(6) When the [Confirm Uninstall] message is shown, click the [OK] button to continue.

Confirm Uninstall		x
Do you want to completely remove the se	elected application and all of it	s features?
	ОК	Cancel

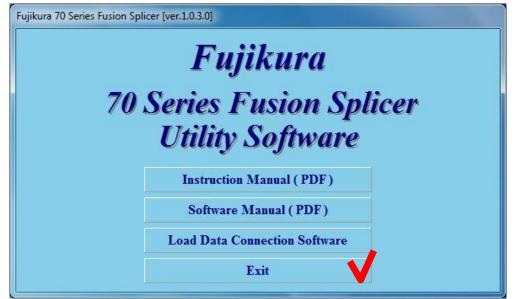
(7) When [Maintenance Complete] window is shown, click the [Finish] button.



(8) When the following message is shown, click the [OK] button to complete installation.

— X
mpleted.
ок

(9) Click the [Exit] button to close menu.



7. Troubleshooting

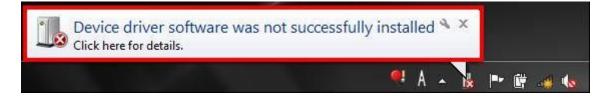
Ŷ

When trouble occurs during installation or when using Data Connection, please read this chapter.

If the trouble is not fixed despite performing the following procedure, please contact us.

7.1. Installation of the Device Driver Failed

When first connecting to PC, the device driver should be installed automatically. If the installation failed (the following window was shown), install device driver according to procedure listed in the following pages.



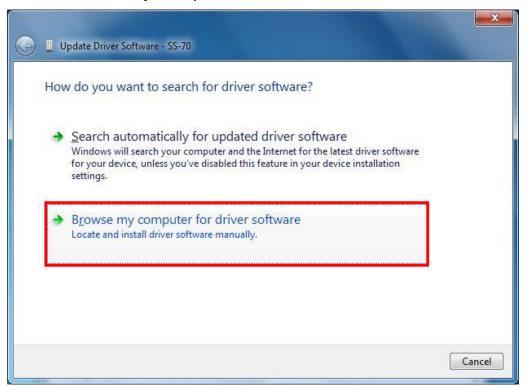
- (1) Open [Start] > [Control Panel] > [System] > [Hardware] > [Device Manager] menu to open "Device Manager".
- (2) Right-click on "SS-70" in the [Jungo] or [Other devices] and select "Update Driver Software...".

If "SS-70" is not listed, confirm the following.

- The splicer is connected to PC with USB cable.
- The splicer is turned on.

🚔 Device Manager		
File Action View	Help	
	1 67 Q D 🙀 😽	
⊳ 👰 Jungo ⊳ 🥌 Keyboards	s host controllers her pointing devices	•
 Monitors Network ada Coher device SS-70 	A CONTRACT AND A	
PCMCIA Processo SD host a Sensors	Disable Uninstall	E
⊳ - 🛗 Smart car ⊳ - 💐 Sound, vi ⊳ - 🎸 Storage c	Scan for hardware changes Properties	
👂 🕵 System devi	ces rial Bus controllers	-
Launches the Update Dr	iver Software Wizard for the selected	E.a.s.

(3) Click "Browse my computer for driver software".



(4) Click [Browse...] and select "C:\FjkUsbDv". After selecting, check [Include subfolders] and click the [Next] button.

S	Update Driver Software - SS-70
	Browse for driver software on your computer
	Search for driver software in this location:
	C:\FjkUsbDv ▼ B <u>r</u> owse
	 Include subfolders 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 Cancel

(5) When the following message is shown, click "Install this driver software anyway".



(6) When the following window is shown, click the [Close] button

🕞 🗕 Update Driver Software - SS-70	×
Windows has successfully updated your driver software	
Windows has finished installing the driver software for this device:	
SS-70	
	Close

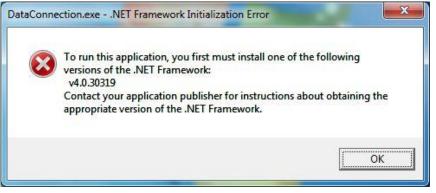
(7) Close "System Properties" and "Device Manager".

7.2. Data Connection Does Not Run

Data Connection is not shown although the icon was clicked

- (a) Windows may not be updated to latest version. Perform Windows Update or Microsoft Update to update Windows.
- (b) Memory capacity or CPU speed may be insufficient to meet the system requirement.
 - Close other running applications.
 - Confirm that memory capacity and CPU speed meet the system requirement.

".NET Framework Initialization Error" is shown when Data Connection is launched



- (a) "Microsoft .NET Framework 4 Client Profile" may not be installed. Double-click "dotNetFx40_Client_x86_x64.exe" in "DotNetFx" folder in instruction CD to install "Microsoft .NET Framework 4 Client Profile".
- (b) Windows may not be updated to latest. Perform Windows Update or Microsoft Update to update Windows.

.NET Framework error is shown when Data Connection is launched

rosoft	.NET Framework
8	Unhandled exception has occurred in your application. If you click Continue, the application will ignore this error and attempt to continue. If you click Quit, the application will close immediately.
	Could not load file or assembly "UsbCore.dll' or one of its dependencies. The specified module could not be found.
▼ <u>D</u> e	etails Quit

 (a) "Microsoft Visual C++ 2010 Redistributable" may not be installed. Double-click following file in "vcredist" folder in instruction CD to install "Microsoft Visual C++ 2010 Redistributable".
 64bit OS: vcredist_x64.exe

32bit OS: vcredist_x86.exe

(b) Windows may not be updated to latest version. Perform Windows Update or Microsoft Update to update Windows.

7.3. Installation of Firmware Failed

If the installation of firmware failed, the following problem will occur. When the problem occurs, perform the following procedure to install the firmware again.

- The splicer cannot be turned on (Splicer does not restart after installation).
- The splicer turns on, but "READY" state is not indicated.
- (1) Turn off the splicer.
- Then keep holding down the [RESET] key and turn on the splicer again. (Keep holding down keys until "SOFTWARE UPDATE MODE" is indicated on the screen.)
- (3) In the [Firmware Update] page of Data Connection, click [Download and install latest firmware] button to install the firmware again.



If the update failure persists or you have some questions about this procedure, please contact us.

7.4. USB Communication Does Not Works

Confirm that the "CONNECTED" is indicated at bottom left of Data Connection window.

"DISCONNECTED" is indicated

- (a) Confirm that the splicer is connected to PC with USB cable.
- (b) Confirm that the splicer is turned on.
- (c) Confirm that the splicer is in "READY" state. Press [RESET] key to change splicer to "READY" state.
- (d) If the external USB hub is used, connect the USB cable to PC directly.
- (e) USB driver may not be installed correctly. Install the Data Connection again.

<u>"Communication Error" message was shown during downloading or uploading ("CONNECTED" is indicated)</u>

- (a) Confirm that the splicer is in "READY" state.
 Press [RESET] key to change splicer to "READY" state.
- (b) If the external USB hub is used, connect the cable to PC directly.
- (c) The firmware version of splicer may not be the latest. If the firmware is not the latest, update the firmware of splicer.

8. Contact Address

Inquiries concerning products should be made to the nearest distributor or one of the following:

Fujikura Europe Ltd. C51 Barwell Business Park Leatherhead Road, Chessington, Surrey KT9 2NY England Tel. +44-20-8240-2000 (Service: +44-20-8240-2020) Fax. +44-20-8240-2010 (Service: +44-20-8240-2029) URL http://www.fujikura.co.uk

AFL Telecommunications 260 Parkway East Duncan, SOUTH CAROLINA 29334 U.S.A. Tel. +1-800-235-3423 (Service: +1-800-866-3602) Fax. +1-864-433-5560 (Service: +1-800-433-5452) P.O.Box 3127 Spartanburg, SC 29304-3127 URL http://www.AFLglobal.com

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URL http://www.fujikura.com.sg

Fujikura Ltd. Optical Fiber & Equipment Department International Sales & Marketing 1-5-1 Kiba, Koto-ku, Tokyo 135-8512 Japan Tel. +81-3-5606-1164 Fax. +81-3-5606-1534 URL http://www.fusionsplicer.fujikura.com

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