FP7 Upgrade Tool Operation Manual

- Applicable models: FP7 CPS41E FP7 CPS31E FP7 CPS31 FP7 CPS31ES FP7 CPS31ES FP7 CPS31S

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1 How to Operate FP7 Upgrade Tool

1.1 How to Activate Upgrade Tool

How to start

1. Unzip the file (FP7CPU_Vxxxx_en.zip) downloaded to a PC into a desired area. The following four files will be decompressed.

File name	Content
Fp7Cpu_Vxxx_VupTool.exe	: Upgrade tool startup module
Fp7Cpu_Vxxx_Vup.dll	: Upgrade tool FP7 DLL file
Fp7Cpu_V3_en.dll	: Resource DLL file
Fp7Cpu_V3_Manual_en.pdf	: Operation Manual PDF file

Name	Туре
Fp7Cpu_VXXX_VupTool.exe	Application
Fp7Cpu_Vxxx.dll	Application extension
Fp7Cpu_V3_en.dll	Application extension
Fp7Cpu_V3_Manual_en.pdf	PDF File

2. Execute the upgrade tool startup module (Fp7Cpu_Vxxx_VupTool.exe).

1.2 The <u>upgrade tool</u> will be activated.

1.2 Advance Preparation for Upgrade Tool

- Advance preparation
- 1. Confirming applicable models: Confirm if the FP7 you use is the applicable model for this tool.
 - Applicable models: FP7 CPS41E FP7 CPS31E FP7 CPS31 FP7 CPS41ES FP7 CPS31ES FP7 CPS31ES FP7 CPS31S
- 2. Change the switch on the FP7 to PROG. mode.



3. Turn on the power to the FP7 and connect the USB cable to a PC. *



* Do not connect more than one FP7 to one PC.

System requirements: OS (WindowsXP SP3, Vista SP2, Windows7 SP1 or later, Windows8)

4. When FPWIN GR7 is active, set it to offline.



Advance preparation (Continuation of the above section)

After confirming the advance preparation (1 to 4), click the "Next" button.

FP7CPU V3 syste	m upgrade tool
Preparation	This tool upgrades FP7CPU. Update program version: Ver.3.03
Communication settings/ Upgrade mode select	 Confirm if the FP7 you use is the supported model for this tool. See here for the list of supported models and manuals. Change the switch on the FP7 to PROG. mode.
Upgrade mode check	RUN COPY
Upgrade	3. Turn on the power to FP7 and connect the USB cable to a PC.
•	4. When FPWIN GR7 is active, set it to offline.
Finish	
	<u>N</u> ext <u>A</u> bort

Description of functions

Confirm in advance on this screen.

- Update program version: Indicates the update version made with this application.
 The update version varies according to a provided update tool. (Screen sample: Ver.3.03)
 When the version of the FP7 you use is the same, it is not necessary to update it.
- See here for the list of supported models and manuals.: This manual is displayed.

"Abort" button: Aborts and exits this application.

"Next" button: Goes to 1.3 Communication Settings/Upgrade Mode Select

1.3 Communication Settings/Upgrade Mode Select

■ Communication settings/Upgrade mode select



Description of functions

The USB port setting and switching to the upgrade mode is made on this screen.

After selecting a USB port and the mode selection button, click the "Next" button.

- Communication settings

Select the USB port connected with the FP7. *1, 2.

*1. When the USB port is automatically selected in the initial display, the USB port is recognized correctly, so the selection is not necessary.

(When more than one FP7 is connected, make only one connection available by turning off the power to the rest of the FP7 units or remove the cables.)

*2. When the USB is not selected in the initial display;

As the FP7 is not recognized, reinsert the USB cable after turning on the power, and

press the *I* "Update" button. (The USB port will be redisplayed.)

- Upgrade mode select

Compare the LED display on the FP7 to the screen, and select the operation mode.

Normal mode: PROG. is on. \rightarrow To Upgrade mode select *3

Upgrade mode: RUN and PROG. flashes alternately. \rightarrow Upgrade

*3. Note: The FP7 may be locked if "Normal mode" is selected in the upgrade mode. (In this case, the FP7 must be rebooted.)

Communication settings/Upgrade mode select (Continuation of the above section) Clicking "Next" with "Normal mode" selected starts changing the mode to the upgrade mode.

(After a short time, the screen will change to "Upgrade mode confirmation screen".)

Preparation	Set communi	cation settings. Selec	t the USB port cor	nnected with FP7.			
▼	USB port:	PIDSX PLC - USB t	o serial port (COM	10)	· · ·		
Communication settings/ Upgrade mode select	Then, check In case of no	the LED display of FF rmal mode, the mode	97, and select an a e will be changed t	ppropriate one. o upgrade mode.			
	Being switche	ed to upgrade mode.	Please wait.				
Upgrade mode check							
▼							
Upgrade							
▼							
Finish							
		_					
			<u>B</u> ack	Next	Abort		
]	
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7CPU V3 syste	em upgrade to		(The so	creen will c	hange a	fter a sl	hort tin
7CPU V3 syste Preparation	em upgrade to Has FP7 beer LED display f	n switched to upgrad lashes during upgrad	(The solution of the solution	creen will c	hange a	fter a sl	hort tin
7CPU V3 syste Preparation	em upgrade to Has FP7 beer LED display f	n switched to upgrad lashes during upgrad Dnic FP7 CP	le mode? le mode as below. S41ES *	creen will c	hange a	fter a sl	hort tin
Preparation Communication settings/ Upgrade mode select	Has FP7 bee LED display f Panaso RUN PROG. ERROR	n switched to upgrad lashes during upgrad onic FP7 CP SD CARD RD COPY	(The so le mode? le mode as below. S41ES * IPMS • IPMS • IPMS • (For	creen will c	hange a	fter a sl	hort tin
Preparation Communication settings/ Upgrade mode select	Has FP7 beet LED display f Panaso RUN PROG. ERROR	ool ashes during upgrad ashes during upgrad onic FP7 CP COM.0 SD CARD SD CARD RD COPY d that FP7 has switch	I (The so (The so le mode? le mode as below. S41ES * I PMS • I PMS • (For med to upgrade mo	CPS41ES)	hange a	fter a sl	hort tin
Preparation Preparation Communication settings/ Upgrade mode select Upgrade mode check	Has FP7 beet LED display f Panaso RUN PROG. ERROR If FP7 does r and try again	bool n switched to upgrad lashes during upgrad bonic FP7 CP COM.0 SD CARD COM.0 SD CARD COPY d that FP7 has switch not change to upgrad n.	(The so le mode? le mode as below. S41ES * IPMS : IPMS : ALARM : (For ned to upgrade mo de mode, turn off a	CPS41ES) de.	hange a	fter a sl	hort tin
Preparation Preparation Communication settings/ Upgrade mode select Upgrade mode check	Has FP7 beet LED display f Panase RUN PROG. ERROR If FP7 does r and try again	Dol ashes during upgrad ashes during upgrad Donic FP7 CP COM.0 SD CARD CARD CARD COPY d that FP7 has switch tot change to upgrad	(The solution of a second seco	CPS41ES) de.	hange a	fter a sl	hort tin
7CPU V3 system Preparation V Communication settings/ Upgrade mode select V Upgrade mode check V Upgrade	Has FP7 beet LED display f Panase RUN PROG. ERROR If FP7 does r and try again	n switched to upgrad ashes during upgrad onic FP7 CP COM.0 SD SD CAPP RD CAPP d that FP7 has switch not change to upgrad	(The so le mode? le mode as below. S41ES * IPNS : IPNS : ALARM · Ie mode, turn off a	CPS41ES) de.	o F₽7,	fter a sl	hort tin
7CPU V3 syste Preparation Communication settings/ Upgrade mode select Upgrade mode check Upgrade Upgrade M	Has FP7 beet LED display f Panase RUN PROG. ERROR If FP7 does r and try again	bol n switched to upgrad lashes during upgrad onic FP7 CP COM.0 SD SD · CARD RD · CAPY · d that FP7 has switch not change to upgrad	(The so le mode? le mode as below. S41ES * IPNS • IPNS • ALARM • (For red to upgrade mo de mode, turn off a	CPS41ES)	hange a	fter a sl	hort tin
7CPU V3 syste Preparation V Communication settings/ Upgrade mode select V Upgrade mode check V Upgrade mode check V Finish	Has FP7 beet LED display f Panase RUN PROG. ERROR If FP7 does r and try again	ashes during upgrad ashes during upgrad onic FP7 CP COM.0 SD SD CARD RD COPY d that FP7 has switch tot change to upgrad	(The solution of a second seco	CPS41ES)	hange a	fter a sl	hort tin

Goes to <u>1.4 Upgrade Mode Check</u>.

1.4 Upgrade Mode Check

Upgrade mode check



Description of functions

Check if the mode has been changed from normal mode to upgrade mode on this screen. After checking that the LED display on the FP7 flashes just like the animation on the screen, check the checkbox and click the "Next" button.

- Upgrade mode select confirmation (After check)

FP7CPU V3 syste	m upgrade tool	X
Preparation	Has FP7 been switched to upgrade mode? LED display flashes during upgrade mode as below.	
Communication settings/ Upgrade mode select	Panasonic FP7 CPS41ES ★ RUN · COM.0 SD · IPMS · PROG.★ SD · CARD · IPNS · ERROR · RD · COPY · ALARM · (For CPS41ES) ✓ Confirmed that FP7 has switched to upgrade mode.	
Upgrade mode check	If FP7 does not change to upgrade mode, turn off and on the power to FP7, and try again.	
Upgrade		
Finish		
	<u>N</u> ext Abo	ort

Goes to 1.5 Upgrade.

1.5 Upgrade

Upgrade

FP7CPU V3 syste	m upgrade tool
Preparation	FP7 version: Ver.3.02 -> Ver.3.03
Communication settings/ Upgrade mode select	Version will be upgraded. Do not turn off the power during updating.
Upgrade mode check	
Upgrade	
Finish	
	<u>N</u> ext <u>Abort</u>

Description of functions

Confirm the current program version and execute the upgrade on this screen.

When selecting the upgrade mode in Communication settings/Upgrade mode select, the current program version is not displayed. (Display example: In case of 3.03; Ver.**.** \rightarrow Ver.3.03)

After the confirmation, click the "Next" button.

Confirmation of starting the upgrade.



Confirm the message and click the "Yes" button. *

* The subsequent operation cannot be aborted. (Proceed with the operation carefully.)

Goes to Upgrade (Start to End)

Upgrade (Start to End)

FP7CPU V3 syste	em upgrade too		X
Preparation	FP7 version:	Ver.3.02 -> Ver.3.03	
Communication settings/ Upgrade mode select	Update data is	being transferred. Please do not turn off the power and wait.	
Upgrade mode check			
Upgrade			
Finish			
		<u>N</u> ext <u>A</u> b	ort

The screen message changes as follows according to the progress.

- (1) "Version will be upgraded. Do not turn off the power during updating."
 - \downarrow (Waiting for starting the upgrade)
- (2) "Update data is being transferred. Please do not turn off the power and wait."
 - \downarrow (FP7 is transferring data.)
- (3) "Firmware is being rewritten. Please do not turn off the power and wait."
 - \downarrow (FP7 is rewriting the firmware.)
- (4) "Upgrade verification in progress"
 - \downarrow (FP7 is waiting for reboot and confirming the version.)

Completed.

Completed
Upgrade has been completed.
ОК

Click the "OK" button to go to <u>1.6 Finish</u>.

* When a message that the FP7 cannot be detected is displayed, reinsert the USB cable and click the "Retry" button.

1.6 Finish

Finish

FP7CPU V3 syste	m upgrade tool			X
Preparation	FP7 version:	Ver.3.02 -> Ver.3.03		
Communication settings/ Upgrade mode select	Upgrade has be Press "Finish" bu	en completed successfully. utton to exit the tool.		
Upgrade mode check				
Upgrade				
Finish				
			Back to Beginning	Einish

Description of functions

The upgrade operation has been completed. Click the "Finish" button to finish the operation.

For upgrade another FP7, click the "Back to Beginning" button.

Goes to <u>1.2 Advance Preparation</u>.

2 List of Error Messages

List of error and warning messages

Erro	r title name	Screen	Cause
1)	Connection error	Communication settings/Upgrade mode select	USB connection error
2)	Connection error	Communication settings/Upgrade mode select	USB is being used.
3)	Version upgrade not supported	Communication settings/Upgrade mode select	Unsupported model
4)	Latest version	Communication settings/Upgrade mode select	The latest version already installed.
5)	Failed in changing the upgrade mode	Communication settings/Upgrade mode select	Communication failure
6)	Operation mode is incorrect	Communication settings/Upgrade mode select	RUN mode
7)	Upgrade failed	Upgrade	Writing error
8)	FP7 cannot be detected	Upgrade	USB reconnection error
9)	FP7 multiple units connection error	Communication settings/Upgrade mode select	Multiple FP7 connections
10)	RUN mode select confirmation	Communication settings/Upgrade mode select	RUN mode
11)	Upgrade data error	None (At the initial startup)	Data error

2.1 Solution for Each Error Message

1) Error message (Connection error)



Solution

- Check if the USB port settings are correct. (Select the correct USB port.)
- Check if the USB and power supply connection cables are securely inserted.
- Check if the FP7 is powered on.
- Check if the connected PLC type is FP7.

2) Error message (Connection error)



Solution

- The USB port is used by another communication software (FPWIN GR/GR7/Pro or HyperTerminal).
- Set it to offline or exit it.

3) Error message (Version upgrade not supported)



Solution

- The model used is not applicable for this tool. Use a supported model.

4) Warning messge (Latest version)



Solution: None (The latest version has been already installed.)

5) Error message (Failed in changing the upgrade mode.)



Solution

- Turn off the power to the FP7 and retry the upgrade from the beginning.

6) Error message (Operation mode is incorrect.)



Solution

- Change the switch on the FP7 to PROG.
- 7) Error message (Upgrade failed)



Solution

Turn off the power to the FP7 and retry the upgrade from the beginning.

8) FP7 cannot be detected.



Solution

- Reinsert the USB cable and click the "Retry" button.

9) FP7 multiple units connection error



Solution

- Turn off the power to the FP7 units not to be upgraded, or remove the USB cables.

10) RUN mode select confirmation



Solution

- Click the "Yes" button. (The mode will be automatically changed to the PROG. mode in the software.)
- When the switch is changed manually, click the "No" button to proceed.

11) Upgrade data error



Solution

Please contact your dealer regarding upgrade data errors.