SCREEN CREATOR 5 User's Manual

### **SCREEN CREATOR 5**

## GC-70 SERIES Supported Version



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#### **Guide of this Manual**

In this manual, when use the Screen Creator5 V3.xx and OIP GC-70, it is explained about necessary information. This manual consists of next three chapters.

The Chapter 1 Installation of Screen Creator 5

When install Screen Creator5 V3.xx, the information that you need is mentioned.

The Chapter 2 Original Function and Limitation

It is mentioned about original function and limitation when you use the GC-70 series.

The Chapter 3 Communication Setting

It is mentioned about a setting method when connect to the PLC by using GC-70.

Refer to the following manual together with this book, when you use Screen Creator.

Vol.1 Screen Creator 5 Manual Introduction

It is mentioned about a basic operation method of Screen Creator 5.

Vol.2 Screen Creator 5 Manual Operations

It is mentioned about the details of each operation of Screen Creator 5.

Vol.3 Screen Creator 5 Manual Connection with PLC and External Equipment

It is mentioned about a method of the communication with PLC and host computer, and a method of the connection with the peripheral device.

Vol.4 Screen Creator 5 Manual Standard Parts Catalog

It is explained the function of the standard part that we provide.

Vol.5 Screen Creator 5 Manual Control Reference

It is a reference manual of the control to use in part making.

Vol.6 Screen Creator 5 Manual K-Basic Program Description

It is explained a method to describe a basic program and a command in screen design.

Vol.7 Screen Creator 5 Manual Troubleshooting and Error Codes

It is mentioned about the restrictions and the processing method at the time of occur the trouble and the error code. when you design a screen by Screen Creator 5.

#### **Safety Precautions**

Please keep the following safety precautions for correct using.

About the damage that occurred because of the handling against these precautions, we cannot bear guarantee and responsibility.



#### Warning

- When OIP break down or malfunctions, or program has a defect, provide the protection safety circuit on outside to ensure the safety of system. Design the system that can ensure safety measure to accident resulting in injury or death or serious disaster.
- When Use touch panel of OIP, never do that make a switch (urgent stop switches) about human life and important injury. Design the system which can support erroneous operation and trouble of the touch panel.
- Give the 3-class grounding to protective earth terminal. When do not give grounding, May be getting shocked.
- When OIP breaks down, Switch OFF immediately, and do not use.
- When output directly to external output device such as the PLC, it is driven the direct output regardless of interrock of ladder circuit. The output may be used for the drive such as motors, and please avoid outputting. It is danger.



#### **Caution**

- Using and keeping the OIP within the specific environment (including vibration, a shock, temperature, the humidity) in accordance with specifications.
- Cannot use OIP at the place with the combustibility, explosive gas or the steam.
- Confirm before power supply injection that the power supply voltage matches the rated power supply voltage of OIP. may be damaging to a device when connect a wrong power supply.
- Do not analyzing and remodeling the OIP. It causes breaking down and trouble.
- The touch panel of OIP is made of glass. therefore, when shocking with a hard thing or when pushing with excessive power, it is the cause of the damage.
- Do not push the touch panel of OIP by pointed something including a mechanical pencil and a driver. It causes scar and breakdown.

#### **About Notion**

In this manual, we use the symbol mark for your safety using, as shown below.



#### Warning

If disregard to use this mark of warning, It occurs to fatal accident or serious accidents.



Caution

If disregard to use this mark of caution, It occurs to lesion or physical damage.



It is precation in the general use.

Note) Explanation and Supplement.

The terms using with this manual are as follows.

**OIP** It is abbreviation of operator interface panel.

**PLC** It is abbreviation of programmable logic controller.

Or it is abbreviation of sequence controller.

Link Unit It is a communication unit that connect the PLC to the OIP. Because a name

differs from by the each companies, we name a link Unit for standardization.

Device It calls device that I/O relay, internal relay, timer, counter, register, others of

PLC devices.

#### **Precaution**

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- 1. No part of this document may be reproduced in any form without permission.
- 2. The features of Screen Creator 5 and this manual are subject to change without notice.
- 3. We prepared this document with the greatest care. If you should find any doubtful or erroneous descriptions or omissions, please contact the Customer Support Desk of our Sales Department.
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# The Chapter 1 About installation of SCREEN CREATOR 5

#### 1-1 About System Requirements

Explanation

The recommended requirements to use Screen Creator 5 V3.xx are as shown below:

Personal Computer

CPU: Intel® Atom™ processor or more.

Memory: 512MB or more free memory space(Recommended 1GB or more free

memory space)

Basic Software: Windows@2000/Windows@XP

/Windows®Vista/Windows®7

Hard Disk: 50MB or more free memory space

Drives: CD-drive, USB Port

Display: Resolution 1024x768(XGA)or more

Personal Computer Preparatory

Mouse: The mouse which works by the basic software of mentioned above. Printer: The printer which works by the basic software of mentioned above.

OIP relation

When you use the GC-50 series, please use a download cable as shown below. Download Cable: GC-S1C1-DEE

When use the GC-70 series, use commercial USB A-B cable as a download cable.



Choose the thing to be able to control RTS/CTS signal that when you use GC-50 series and when your personal computer does not have serial communication port and when you use Commercial USB - serial number conversion adapter.

#### 1-2 Starting Installation



Screen Creator 5 V3.xx is provided by download from CD-ROM or our website. I explain a method that installs the Screen Creator to personal computer.



- 1. Start up the Windows®
- Set the CD of Screen Creator 5 into the CD drive of the personal computer.When you download from our website, please save and decompression any place in your personal computer.
- 3. Execute the "x:\disk1\setup.exe" Please read that "x" is the drive name of CD-ROM drive, or "x" is the place that download file is uncompressed.
- 4. Since start up the installer, follow the instructions that are shown in the screen.
- 5. When installation is completed, a short cut icon to start up Screen Creator 5 is created on a desktop.

#### 1-3 Installation of USB Driver



The Screen Creator 5 V3.xx supports the OIP GC-70 series.

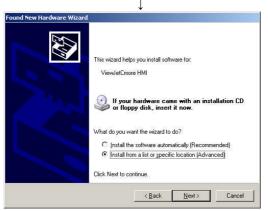
The PC which installed the Screen Creator 5 V3.xx connects the GC-70 series by USB. It explains a method that installs the device driver for USB connection into a personal computer.



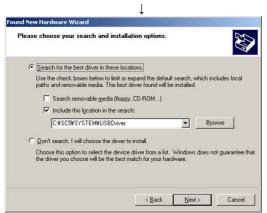
- 1. Connect USB B port of GC-70 and USB A port of Personal Computer by a cable, and switch on GC-70
- 2. When "Welcome to the Found New Hardware Wizard" is displayed on the personal computer screen, install it by the process as shown below.



Choose "No, not this time" and click on the "Next" button.

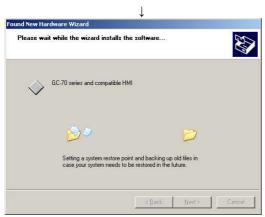


Choose "Install from a list or specific location [Advanced]", and click on the "next" button.



Choose "Search for the best driver in these locations" and click the check box of "Include this location in the search" and types the "SC5 installed folder\SYSTEM\USBDriver" at under space of that check box, and click on the "Next" button.

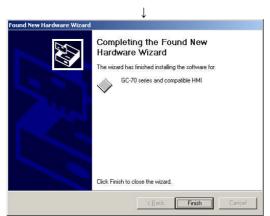
 $\downarrow$ 



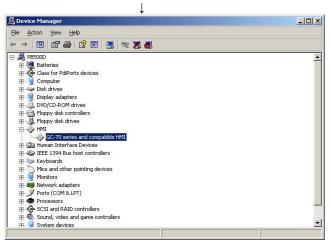
The installation of the driver is started.



When the above message displays during the installation of the driver, types the "SC5 installed folder\SYSTEM\USBDriver" into "Copy files from:", and click on the "OK" button.



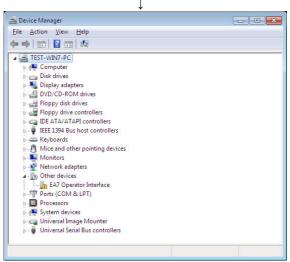
When installation is completed, click on the "Finish" button.



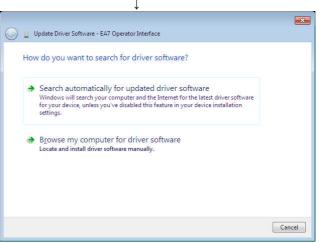
When installation is finish, Device Manager has a group called "HMI", and "GC-70 series and compatible HMI" is registered in that.

2'. When "Welcome to the Found New Hardware Wizard" is not displayed on the Personal computer screen, install it by the process as shown below.

Execute the "Control Panel"  $\rightarrow$  "System  $\rightarrow$  Device Manager" In the case of Windows®2000 or Windows®XP, execute the "Control Panel"  $\rightarrow$  "System  $\rightarrow$ "Hardware"  $\rightarrow$  Device Manager"



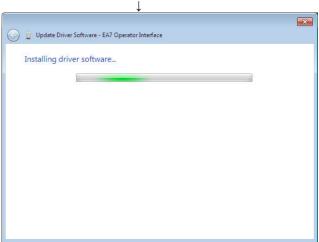
Right-click "EA7 Operator Interface" and a pop-up menu is displayed, choose the "Update Driver Software"



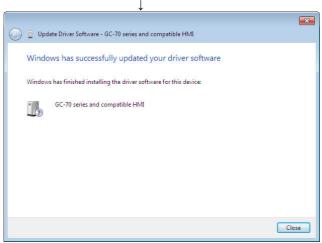
Choose the "Search automatically for updated driver software"



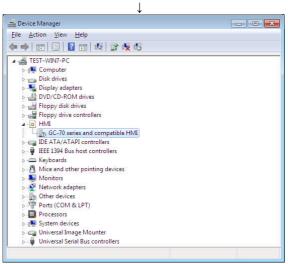
When security warn message is displayed, choose the "Install this driver software anyway"



The installation of the driver is started.



When the installation of the driver is completed, click on the "Close" button.



When it is correctly installation, group named "HMI" is made in Device Manager. and the "GC-70 series and compatible HMI" is registered in "HMI".

# The Chapter 2 Original Function and Limitation

#### 2-1 Outline



The functions are little bit different between GC-70 and GC-50 series, when use GC-70 series by Screen Creator 5 V3.xx.

It explains the difference, when use GC-70 series.

- •Transfer method of screen data In the GC-70 series, the transfer method of screen data use by the storage such as CF card, USB storage or USB communication. It does not support transfer by serial communication.
- •Display of the monochromatic model The display color in monochromatic model (GC-73LM series) of the GC-70 series is the object of the white in the black background.
- Limit of parts and K-BASIC It does not support some parts and K-BASIC in the GC-70 series.
- •Setting method of the RAM file When you use a RAM file (file system) in the GC-70 series, part of setting method of the system menu is different from the GC-50 series.
- •Download and backup by the GC-70 panel. It explains the method of external storage to the panel of GC-70 series for downloading of data, and the data backup.

#### 2-2 Transfer of Screen Data



The screen data transfer to GC-70 series. The data made by Screen Creator 5 V3.xx are transferred to OIP by storage way or USB communication.

I explain a method of downloading and the upload of screen data concretely as shown below.

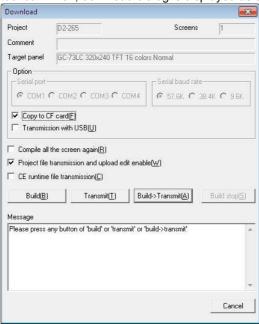
#### (1) Download of Screen Data to a Storage



It is a method to download the screen data which you made to an external storage.



1. Select "Project"→"Download" select from menu or click to "Download "button in the tool bar. Then, download dialog is displayed as shown below.



- 2. Select the "Build (B)"button to makes to download data.

  When the error occurs during making data, the error message shows a place of "Message". When a compile error occurs, please revise an error with reference to "a compile error" and make downloading data again.
- 3. When the making of downloading data is completed, you can download to the panel. At this time, please let recognize as drive that connecting the external storage to the personal computer. For example, the external storage is USB storage or the CF card. And check on the check box of "Copy to CF card(F)" and when you ready, select the "Transfer(T)" button.
- 4. A dialog open select device as follows.



- 5. Select a drive name of the downloading from "Drive of CF card(D)" of the dialog, and please click to the "OK" button.
  - Then, Screen data will be downloading to an external storage. The screen data are saved in a folder called "GC-7x" of the external storage.
- 6. Connect this external storage to a USB port of GC-70 series or CF card slot, and starting "download" of the system menu of the GC-70 series.



•The process that It explained by the above, only transfer screen data. When you want to transfer a communication driver of connected PLC together; enter the check into "CE runtime file transmission(C)" of download dialog, and please start an above process.

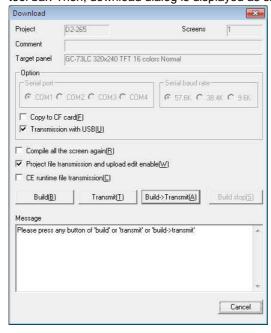
#### (2)Download of Screen Data by USB Communication



It explains the method to make screen data, and download the screen data by USB communication into GC-70.



1. Select "Project"→"Download" select from menu or click to "Download" button in the tool bar. Then, download dialog is displayed as shown below.



- 2. Select the "Build (B)" button to makes to download data. When the error occurs during making data, the error message shows a place of "Message". When a compile error occurs, please revise an error with reference to "a compile error" and make downloading data again.
- 3. When the making of downloading data is completed, you can download to the panel. At this time, please let recognize as drive that connecting the external storage to the personal computer. For example, the external storage is USB storage or the CF card. And check on the check box of "Copy to CF card(F)" and when you ready, select the "Transfer(T)"button.



4. A dialog open select device as follows.

5. When click to the "OK" button of dialog, start to download the screen data.



•The process that It explained by the above, only transfer screen data. When you want to transfer a communication driver of connected PLC together; enter the check into "CE runtime file transmission(<u>C</u>)" of download dialog, and please start an above process.



•In GC-50 series, it needs to show download screen before download. But in GC-70 series, it always starts to download even if it displays any screen. During the downloading is finished displaying screen, and after downloading us completed, the new screen is displayed.

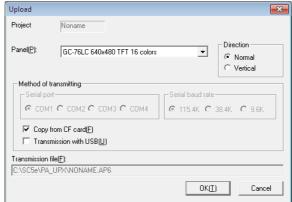
#### (3)Upload of The Screen Data From a Storage



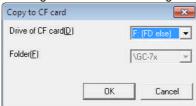
Upload the screen data of external storage to the personal computer that Screen Creator is doing.



1. Select "Project" → "Upload" in menu, The upload dialog is displayed as shown below.



- 2. Select the panel and the setting to the screen. At this time, connecting the external storage to a personal computer. The external storage is for example USB storage which contains screen data and the CF card. A meaning of this act is to let a personal computer recognize an external storage as a drive. In addition, you check on a check box "Copy from CF card(F) of the dialog. and When you ready, please click to the "OK(T)" button.
- 3. A dialog to choose a forwarding address is displayed.



Select the drive name of original upload from "Drive of CF card(D)" of dialog, and click to the "OK" button. Then, the screen data will uploaded from external storage.



•The screen data of external storage to use for upload is downloaded in "(1) Download of Screen Data to a Storage", Or the backup to the external storage that it is made by backup function of GC-70 series.

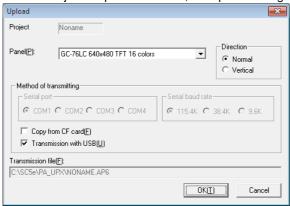
#### (4) The Upload of Screen Data by USB Communication



Upload the screen data which is connected by USB in GC-70 series to the personal computer which is doing Screen Creator.



1. Select "Project"-"Upload" in menu, the upload dialog is displayed as shown below.



- 2. Select the panel and the setting to the screen. At this time, connecting OIP to personal computer by download cable. and, check on the check box of "Transmission with USB( $\underline{U}$ )". When you ready, click to the "OK( $\underline{T}$ )" button.
- 3. A dialog open select device as follows.



4. When click to the "OK" button of dialog, starting to upload the screen data.



•In GC-50 series, it needs to show download screen before download. But in GC-70 series, it always starts to upload even if it displays any screen.

#### (5)Restore of Upload Project



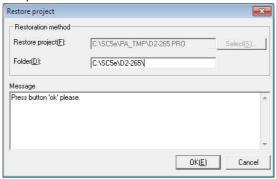
When a project file is added to the uploaded screen data, restoring the project.



- 1. Select "Project" → "Upload"-"Restore of Upload Project" in menu.
- 2. When two uploaded screen data that there are the GC-50 series and GC-70 series, the dialog is displayed. Select the wanting to restore on the dialog.



- 3. GC-50 series or GC-70 series choose the screen of the one that you want to restore, and click to the "OK" button.
- 4. Restore dialog of project is displayed, change the folder of the restore as necessary, and please select the "OK" button.



5. Message area of dialog is displayed process and result of restore. When restore, finish "cancel" button change "Exit" button, then select the "Exit" button.

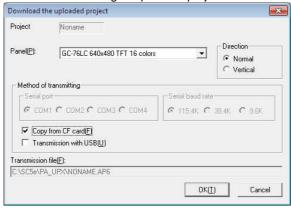
#### (6) Download to The Storage of The Upload Project



Download the upload screen data to the external storage.



1. Select "Project" → "Upload" → "Download of Upload Project" in menu, then displaying the download dialog of uploaded project as shown below.



2. Next is download.

At this time, please let recognize as drive that connecting the external storage to the personal computer. The external storage is for example USB storage or the CF card. And when you ready, click to the " $OK(\underline{T})$ " button.

3. A dialog open select device as follows.



- 4. Select a drive name of the downloading from "Drive of CF card(D)" of the dialog, and please click to the "OK" button.
  - Then, Screen data will be downloading to an external storage. The screen data are saved in a folder called "GC-7x" of the external storage.
- 5. Connect the external storage to the USB port of GC-70 series or CF card slot, and starting the "download" of system menu in GC-70 series.

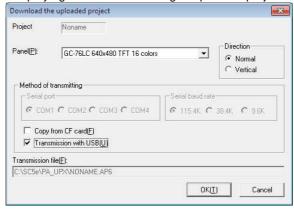
#### (7) Download of Upload Project by USB Communication



Download the upload project data to the GC-70 by USB communication.



1. Select the "Project" → "Upload" → "Downloaded the uploaded project" in menu, then displaying the download dialog of uploaded project as shown below.



2. Next is download.

At this time, connect the OIP to the personal computer by download cable. And, select the check box of "Transmission with USB( $\underline{U}$ )" of dialog. When you ready, and click to the "OK( $\underline{T}$ )" button.

3. A dialog open select device as follows.



4. When click to the "OK" button of dialog, start to download the project data.

#### 2-3 Display of Monochrome Type



The GC-73LM series of the GC-70 series is displayed with two colors of monochrome to become the white and black. The background color is black, and a color of the objects is white.

The following, I explain a method that deals with color scheme relation to add for the GC-73LM series.

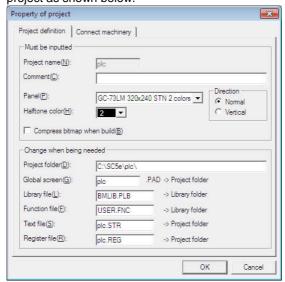
#### (1) Color Convert of on Change of The Panel



When the panel of project changes into GC-73 from GC-53 series, such as other type, convert to display colors.



1. Select "Project"→"Property of Project" in menu, then displaying the property dialog of project as shown below.



- 2. Change the panel of dialog to GC-73LM, and click to the "OK" button.
- 3. Following message box of the color conversion and click to the "OK" button.



Color conversion is executed, and a color set for other models is converted into two colors of monochrome for the GC-73LM series. After that, you can draw as GC-73LM series screen.

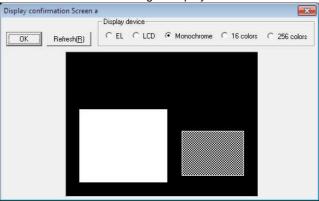
#### (2) Indication Confirm of Monochrome



Explain about screen display confirmation function, when select the GC-73LM to the panel of project.



1. While displaying any screen, select "Tool" → "Display confirmation Screen" in menu, and indication confirm dialog is displayed as shown below.



2. When select "Monochrome" in dialog box, you can confirm the screen by the display of a suitable color for GC-73LM.

#### 2-4 Parts and Limit of K-BASIC



The GC-70 series has the limit of the use that there are some parts and K-BASIC commands. It explains contents of the limit.

#### (1)Limit of Parts



GC-70 series does not support print function, therefore you cannot use "Screen Print"

#### (2)Limit of Order of K-BASIC



GC-70 series cannot use the command of K-BASIC that it is as shown below.

Parallel Control

CLOSEPARALLEL, INP, INPBIT, OPENPARALLEL, OUT, OUTBIT, OUTBITSTAT, OUTSTAT, REOPENPARALLEL

Hard Copy **COPY** 

#### 2-5 Setting of The RAM File

Explanation

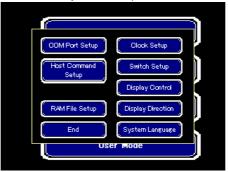
It explains method of setting the RAM file, when using the file system function by the GC-70 series.



1. Push on the screen left-upper of the GC-70 series for three seconds to display the system menu. When interlock works, cancel it. Or, switch on GC -70 while pushing on the screen left-upper.and, wait until the user screen is displayed. Then system menu is displayed. Incidentally, it is screen of GC-73LC as shown below.



2. Touch the "System Setup" button, and the system setting screen is displayed.



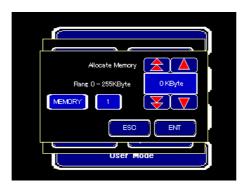
Touch the "RAM file setup" button, and RAM file setting screen is displayed.
 When use the MS-DOS file system, set the "DRIVE" and set the Allocate Memory size of the file.



K-BASIC can be use following the drive name.

Drive name	Contents
Α	Using a part of the backup memory of the GC-70 series as file
	system.
E	Using a CF card as file system.
G	Using an USB storage as file system.

4. When use memory file, touch the "DRIVE". and change to the "MEMORY". Touch the number button of side of "Memory", and set the block number. You can set between 1 and 16. and, set the amount used of the file.



K-BASIC can be use following the drive name.

Drive name	Contents
MEMORY	Using a part of the backup memory of the GC-70 series as memory
	file.



When use "A" and "MEMORY" for a drive name, It use the backup memory of GC-70 series. Please do not over 255kbyte for total of capacity of back up variable on the screen program.

#### 2-6 Download and Backup by Only GC-70 Series

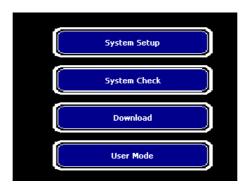
Explanation

It explains method that download the screen data from external storage by GC-70 series, and backup the screen data to external storage by GC-70 series.

#### (1) Download From External Storage



1. Push on the screen left-upper of the GC-70 series for three seconds to display the system menu. When interlock works, cancel it. or, switch on GC -70 while pushing on the screen left-upper.and, wait until the user screen is displayed. Then system menu is displayed. Incidentally, it is the screen of GC-73LC as shown below.



2. Touch the "Download" button to display the download select screen.

At this time, set the external storage to the GC-70 series. For example, the external storage is USB storage or CF card.

Touch the "Download". When downloading system data with screen data together, change "No" of "System Transfer" to "Yes". Then Touch the "next"





•It is necessary situation that the downloaded data from Screen Creator 5 exist in the "GC-7x" folder of setting storage. Or it is necessary situation that the backup data to explain on the next (2) exist.

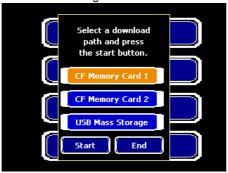


•When transfer the system, the PLC protocol driver and system menu setting information and backup memory data in the storage are transferred with screen data.

#### 3. Select to download.

- "CF Memory Card 1" is CF of CF card slot of inside GC-70 series.
- "CF Memory Card 2" is CF of CF card slot of external GC-70 series.
- "USB Mass storage" is the storage that it is connected to the USB port of GC-70

When you choose, touch the "Start" button to start download. When the download is completed, touch the "End" button. back to previous screen and touch the "End" button again. then, screen backs to main screen. When back to main screen, You can remove the storage.





GC-76LC has a CF card slot. But, GC-73XX-R and GC-73XX-RS(XX is any alphabet) series does not have a CF card slot.



External CF card slot is under planning now.

#### (2) Backup to External Storage



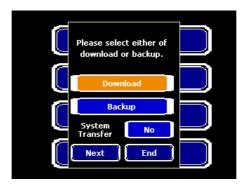
 Push on the screen left-upper of the GC-70 series for three seconds to display the system menu.

When interlock works, cancel it. Or, switch on GC -70 while pushing on the screen left-upper.and, wait until the user screen is displayed. Then system menu is displayed. Incidentally, it is the screen of GC-73LC as shown below.



Touch the "download" button to display the download choice screen.
 At this time, set the external storage to the GC-70 series. For example, the external storage is USB storage or CF card.

And touch the "Back up". When back up system data with screen data together, touch the "No" of "System Transfer" to change "Yes" then Touch the "Next"





•When transfer the system, the PLC protocol driver and system menu setting information and backup memory data in the GC-70 series are transferred with screen data.

3. Choose the backup.

Choose the download.

"CF memory card 1" is CF of CF card slot of inside GC-70 series.

"CF memory card 2" is CF of CF card slot of external GC-70 series.

"USB mass storage" is the storage that it is connected to the USB port of GC-70 series.

When you choose, touch the "Start" button to start backup. When the backup is completed, touch the "End" button. Back to previous screen, touch the "End" button again. then, screen backs to main screen. When back to main, You can remove the storage.





•Backed up data is saved to the "GC-7x" folder of storage.



GC-76LC has a CF card slot. But, GC-73XX-R and GC-73XX-RS(XX is any alphabet) series does not have a CF card slot.



External CF card slot is going to be supported now.

# The Chapter 3 Communication Setting

#### **3-1 Communication Interface Specification**

#### (1) Transmission Specifications

	<b>.</b> :	
Item	Description	
Number of the port	One port	
Connector of panel	Dsub15pin(female) Inch screw	
side		
Communication type	EIA-232/422/485 compliant, non isolated	
Baud rate	1200,2400,4800,9600,19200,38400,57600,115200bps	
	(Set by a communication parameter)	
Data format	Start bit: 1bit	
	Stop bit: 1, 2bit	
	Data length: 7,8	
	Parity : EVEN,ODD,NONE	
	(Set by a communication parameter)	

#### (2) Connector Pin Assignment

Item			Descript	ion
Connector Pin Assignment	8 0 <b>1</b> 5		9	
Pin Name	Pin	Pin Name	Direction	Description
	1	FG		Frame Ground
	2	TXD	Output	Sending data 232C
	3	RXD	Input	Receiving data 232C
	4	NC		
	5	LG		Signal Ground
	6	NC		
	7	CS	Input	Clear to send signal 232C
	8	RS	Output	Request to send signal 232C
	9	RD+	Input	Receiving data (+) 422/485
	10	RD-	Input	Receiving data (-) 422/485
	11	SD+	Output	Sending data (+) 422/485
	12	SD-	Output	Sending data (-) 422/485
	13	Term Resistor		Connect to pin9
	14	NC		
	15	NC		
	Shell	FG		Frame Ground



Prevent you from connecting anything to an unused terminal.

#### 3-2 Communication Setting

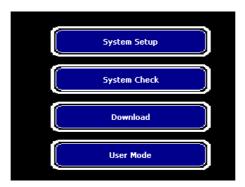
#### (1) Setting Communication Parameter



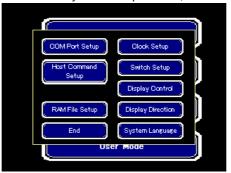
Set the communication parameter in conformity to a device connected to the communication port of GC -70.



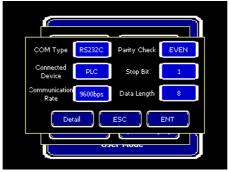
1. Push on the screen left-upper of the GC-70 series for three seconds to display the system menu. When interlock works, cancel it. Or, switch on GC -70 while pushing on the screen left-upper.and, wait until the user screen is displayed. Then system menu is displayed. Incidentally, it is screen of GC-73LC as shown below.



2. Touch the "System Setup" button, and the system setting screen is displayed.



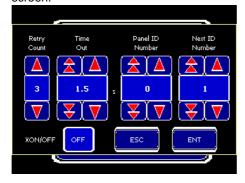
3. Touch the "COM Port Setup" button, and the serial port setting screen is displayed.



4. Touch the set point button of each communication parameter, and set it.

rouch the set point	button of each communication parameter, and set it.
Communication	Description
parameter	
communication	Set the communication standard in conformity to a connection device.
standard	Default is "RS232C".
	The display changes
	RS232C→RS422→RS485→RS232C
	Each time you touch the set point button.
	When use two-wire in the RS422, use it after setting to the RS485.
	When use four-wire in the RS485, use it after setting to the RS422.
communication	Set the communication classification in conformity to a connection
type	device.
	Default is "PLC".
	The display changes
	PLC→host→Unused→PLC
	Each time you touch the set point button.
	When connect to PLC, set to the "PLC". and, when communicate to
	host, set to the "host".
Baud rate	Set the communication speed in conformity to a connection device.
	Default is "9600"
	The display changes
	9600→19200→38400→57600→115200→1200→2400→4800→9600
	Each time you touch the set point button.
Parity	Set the parity bit in conformity to a connection device.
	Default is "EVEN"
	The display changes
	EVEN→NONE→ODD→EVEN
	Each time you touch the set point button.
Stop bit	Set the parity bit in conformity to a connection device.
	Default is "1"
	The display changes
	1 <del>→</del> 2→1
	Each time you touch the set point button.
Data length	Set the data length in conformity to a connection device.
	Default is "8"
	The display changes
	8→7→8
	Each time you touch the set point button.

5. When set the retry and the timeout, touch the "Detail" button, and set the detailed setting screen.



6. Touch the set point button of each detailed communication parameter, and set it.

Item	Description
Retry Count	When a communication error occurs, set the number of retries.  Default is "3 times".  It can set to 0-7 times.
Timeout Time	When a response of the communication does not come back, it is time until occurring a time-out error.  Default is "1.5 seconds".  It can set to 0.0-25.5 seconds.  When set to 0.0 seconds, it keeps waiting the response of the communication.
Panel ID Number	When use command method and memory link method by the communication with host computers, set the code number to allocate for GC -70.  Default is "0".  It can set 0-255.
Next ID Number	Do not use.
XON/XOFF	Set to Xon/Xoff control use or not(off).  Default is "off".



GC-70 series does not support M:N connection.

#### 3-3 Connectable PLC

#### (1) List of Connectable PLC

Explanation

When use the GC-70, screen creator is connectable to the following PLC.

No.	Support protocol PLC
1	Koyo(KOSTAC S)
2	Koyo(CCM3)
3	Koyo(DL)
4	Koyo(DL MODBUS)
5	JTEKT(PC2)
6	JTEKT(PC3)
7	JTEKT(PCk05)
8	JTEKT(PCk05 MODBUS)
9	JTEKT(PCk06)
10	JTEKT(PCk06 MODBUS)
11	JTEKT(PCk230)
12	01=11(101=001)
13	
14	Mitsubishi(AnN/AnS)(LINK)
15	Mitsubishi(AnN/AnS)(LINK)(High-speed)
16	Mitsubishi(AnA/AnU)(LINK)
17	Mitsubishi(AnA/AnU)(LINK)(High-speed)
18	Mitsubishi(QnA)(LINK)
19	Mitsubishi(QnA)(LINK)(High-speed)
20	OMRON(C)
21	OMRON(CS1)
22	SHARP(Direct to CPU)
23	SHARP(LINK)
24	Yasukawa electric(Inverter)
25	Yokogawa(CPU_No.1)
26	Yokogawa(CPU_No.1) (High-speed)
27	Yokogawa(CPU_No.2)
28	Yokogawa(CPU_No.2) (High-speed)
29	Yokogawa(CPU_No.3)
30	Yokogawa(CPU_No.3) (High-speed)
31	Yokogawa(CPU_No.4)
32	Yokogawa(CPU_No.4) (High-speed)
33	Yokogawa(CPU_No.variable)
34	Yokogawa(CPU_No.variable) (High-speed)
35	Toyo electric works(micro-GPCH)

#### Additional Manual SCREEN CREATOR 5 Ver 3.xx GC-70 SERIES Supported Version

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