# 36 Display/Operate the Computer Screen on the GP

This section reviews how to remotely access a server computer from a display unit. First, read "36.1 Action Environment" (page 36-2) for a summary of this feature, and proceed to your target description page from "36.2 Settings Menu" (page 36-3).

36.1	Action Environment	
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# 36.1 Action Environment

#### 36.1.1 Summary

## ■ RPA

RPA is an abbreviation for Remote PC Access and is used to display server computer data on the display unit using UltraVNC.

With the Remote PC Access Display, you can view Excel and PDF documents from the server computer on the display unit. You can also manipulate the mouse or keyboard on the server from the display unit. Remote PC Access is well-suited for computer maintenance and for viewing documents saved on the server computer.



IMPORTANT	• Before using this feature, purchase the RPA key code (Type: EX-RPA) and
	provide the key code for each display using RPA.
	• The key code cannot be reissued if you lose it. Please keep it at hand.
	• For more information on key code input, see
	"36.3.2 Setup Procedure Procedure" (page 36-7)
	• You can use this feature when the GP is connected to the computer by a LAN
	port.

NOTE	• Only some models can use RPA features. For more information, see
	*1.3 List of Supported Functions by Device" (page 1-5)

#### 36.1.2 VNC Server

To use the RPA feature, you must first install UltraVNC (Version 1.02) on the server computer.

UltraVNC (Version 1.02) is in the following folder in the install CD. \RPA\UltraVNC\UltraVNC-102-Setup.exe (Ultra VNC set up file)

IMPORTANT	<ul> <li>Other VNC software will not function properly.</li> <li>UltraVNC (Version 1.02) has been confirmed to run correctly. However, the</li> </ul>	
	is no guarantee that the application can run in all environments and setups. Before using this tool, make sure you test the application.	

# 36.2 Settings Menu



# 36.3 Display/Operate the computer screen on the GP

#### 36.3.1 Introduction

When you connect a server computer and display unit over a LAN, you can view files such as Excel and PDFs using the RPA Display feature on the display unit.

At the production site, you can display an Excel file listing production values, PDF files used to illustrate operation procedures, or PDF manuals.

For example, the show window displays the Excel screen of a desired production state when you touch the "Production State Display" switch.



# Before using this feature, purchase a Remote PC Access key code (Type: EX-RPA) for each display that will use remote PC access. The key code cannot be reissued if you lose it. Please keep it at hand. For more information on key code input, see

<sup>(</sup><sup>(</sup>)</sup> "36.3.2 Setup Procedure ■ Procedure" (page 36-7)

# NOTE

• When you display the popup keyboard for the RPA function on the display unit, you can operate the server computer screen with the touch display.



Also, you can operate the server computer screen on the display unit, if you connect the mouse and keypad registration to the USB port of the display unit.



\* This supports Japanese type 106 keypad registration or English type 101 keypad registration.

#### 36.3.2 Setup Procedure

	Please refer to the settings guide for details.
NOTE	"36.4.1 Remote PC Access Window Display Settings Guide" (page 36-16)
	"5.14.6 [System Settings] Setting Guide
	• Browse "Editing procedure for parts" for parts placement and details on
	settings for address, shape, color, label.
	"9.6.1 Editing Parts" (page 9-38)

#### Necessary Device

- Display Unit. See "1.3 List of Supported Functions by Device" (page 1-5) for supported models.
- GP-Pro EX (Ver2.00or later)
- Key code for Remote PC Access (Our available product. Type: EX-RPA)
- Server Computer with Ultra VNC installed
- LAN cable and HUB (Commercial product)

## Procedure Outline

- 1 Set up the server computer.
- 2 Connect the display unit and server computer over the LAN.
- **3** Enter the key code in GP-Pro EX.
- 4 Set up the remote PC access window display on the base screen.
- 5 Set up the switch to display the RPA window.

#### Procedure

1 Set up the server computer.



Install the following software on the server computer.

	Ultra VNC
Access Method	Included in the folder in the install CD. \RPA\UltraVNC\UltraVNC-102-Setup.exe (UltraVNC set up file)
Install Procedure	http://ultravnc.sourceforge.net/install/installation.html (English)
License	http://ultravnc.sourceforge.net/general/index.html
Supported OS	http://ultravnc.sourceforge.net/
Connection Configuration	You can connect up to 8 server computers to each display unit. However, you cannot connect multiple display units to one server computer. Switch the connection each time. You can specify the detailed settings by "Multi viewer connections" in "Win VNC Current User Properties" of Ultra VNC.

IMPORTANT	•	This software was developed by the VNC TEAM. UltraVNC (Version 1.02)
		has been confirmed to run correctly. However, there is no guarantee that the
		application can run in all environments and setups. Before using this tool,
		make sure you test the application.

- **2** Starts the Ultra VNC Server application.
- **3** In the [Win VNC Current User Properties], under [Authentication] set the [VNC Password] with up to 30 single-byte characters. Define other settings as required.

Authentication VNC Password:
Require MS Logon (User/Pass./Domain)     New MS Logon (supports multiple domains)
Configure MS Logon Groups

IMPORTANT	<ul> <li>Disable the Video Hook Driver settings. The mouse cursor may not be displayed.</li> <li>Procedure</li> <li>Right-click the UltraVNC icon and select [Properties]. The following dialog box appears. Clear the [Video Hook Driver] check box.</li> </ul>		
	WinVNC: Current User Properties		
	Server Screen Updates Handling		
	Poll Full Screen (Ultra Fast)		
	Poll Foreground Window     Poll Console Windows Only     Poll Window Under Cursor     Poll On Event Only		
	Video Hook Driver Check the Video Hook Driver		
	Low Accuracy ( Turbo Speed )		
	⊂ Single Window Sharing		
	Share only the Server Window Named :		
	• On the server PC, make sure the display settings are set to 16 bit color		

- On the server PC, make sure the display settings are set to 16 bit color quality. In the Windows Control Panel's [Display Properties] dialog box, see the [Settings] tab. Other color settings will prevent the display unit from connecting and cause connection errors.
- 4 Connect the display unit and server computer via the LAN.

• On the server PC, set up the [Default Gateway]. Without this set up, the display unit's connection to the server PC might fail.

5 Launch GP-Pro EX. From the [System Settings] click [Display Unit], and then select the [Extended Settings] tab. In the [Remote PC Access Key Code] area click the [Settings] button and type the key code.

System Settine Display Display Display Uni Logic Progr. Video/Movi Font	Nodel     A0P-4500T       Orientation     Landcope       Display     Operation       Model     Logic       System Area     Extended Settings       Device Monitor     Extended Settings       Device Monitor     Global Window is set to Indirect.       Other     Remote PC Access Key Code Settin	
IMPORTANT	• The key code cannot be reissued if you lose it. Please keep it at hand.	
• If you do not enter a valid key code and you draw a Remote PC Access Display on one of the screens, when you save the project a message appears indicating the key code is not set up. Without the key code, you cannot transfer the project.		

6 Open a Base Screen, and from the [Parts (P)] menu select [Remote PC Access Window Display (I)], or click 🖳 to draw the object.

NOTE

7 Double click the allocated remote PC access window display to open the settings dialog box.

💰 Remote PC Access	Window Display	×
Parts ID	Basic	
RW_0000 == Comment	Remote PC Access Window Number	1
	Туре	Bit Trigger
	Remote PC Access Trigger Bit Address	[PLC1]X00000
	Remote PC Access server address	
	Port	5900
	Password	
	Server Display Scaling	Actual size
	🔲 Window Interchange	
	🕞 Enable Popup Keypad	
	Full keypad	O Numeric keypad
Help ( <u>H</u> )		OK (Q) Cancel

8 From [Type], select either [Bit Trigger] or [Activate Switch].

Туре	Bit Trigger 💌
Remote PC Access	Bit Trigger
Trigger Bit Address	Activate Switch

Bit Trigger	<ul> <li>When the bit designated by [Remote PC Access Bit Address] is on, the server computer screen is displayed in a window.</li> <li><b>NOTE</b></li> <li>If you start the remote PC access window display by [Bit Trigger], the remote PC access trigger bit address turns OFF automatically when you push the x button in the remote PC access window display. Also the RPA start bit turns OFF when you switch the screen.</li> </ul>
Activate Switch	The [Switch] tab is added to the dialog box. The [RPA Window Display Switch] is located beside the RPA window parts. When you touch this switch, the server computer screen is displayed as a window on the GP.

9 Input the IP address and port number of the server computer connected to the [Remote PC Access Server Address] and [Port Number], respectively For example, IP Address 192.168.0.1, Port Number 5900

Remote PC Access server address	192 168 0 1
Port	5900

10 In [Password], enter a password up to 30 characters long.

	Password	remote	
	1 assmola	lienote	
	Server Display Scaling	Actual size	
	🔲 Window Interchange		
	🔽 Enable Popup Keypad.		
	<ul> <li>Full keypad</li> </ul>	🔿 Numeric keypad	
NOTE	• You must use the	e same password in GP-Pro EX	and UltraVNC.
	ΓA	uthentication	
		NC Password:	
	Ľ		
		Require MS Logon (User/Pass./Domain)	
		🔲 New MS Logon (supports multiple dom	ains)
		Configure MS Logen Groups	

When the RPA window is displayed on the GP, password authentication is performed automatically. If the password is validated, you will be connected and do not need to input the password on the GP.

11 Select the server display screen size in [Server display scaling].

Password	remote	
Server Display Scaling	Actual size	
🔲 Window Interchange		
🔽 Enable Popup Keypad.		1
Full keypad	C Numeric keypad	
L		1

12 Select the [Enable Popup Keypad] check box and select the type of keypad.

the operation on the PC keyboard.

	Password remote
	Server Display Scaling Actual size
	Window Interchange
	FIZ Enable Popup Keypad.
	Full keypad C Numeric keypad
OTE	• The layout of each keypad is as follows. The operation of each k

matches

The text keypad for A - Z and the special keys such as ENT, Shift, Ctrl Full keypad key etc. are displayed. If [System Language] in [Menu and Error Settings] is [Japanese] ESC F6 F7 F8 F9 F10 F11 F12 HM END INS DEL F1 半全 8.6 BS 0 E R Y TAB W T ENT CAP A S D G H 3 K N Shift 7 Х C V В M < Shift SPACE PU PD Ctr 1 Alt 1 1 If [System Language]in [Menu and Error Settings] is [English] F6 HM END INS DEL F7 F8 F9 F10 ES BS TAB Q ENT S G Н J K CAP F X В N < M Shift Ζ Shift 7 PU 1 PD Ctr 1 Alt SPACE Ŧ The numeric keypad (0-9), the arrow keys pointing right, left, up and Numeric keypad down, and the Del and Ent keys are displayed. 1 t 9 7 8 DEL 4 5 6 2 1 3 ENT Й

# NOTE

- Refer to the following setup to operate the mouse or keyboard connected to the display unit.
  - "36.4.2 System Settings [Input Equipment Settings] [Remote PC Access Input] Settings Guide" (page 36-20)
- Operating the mouse or keyboard connected to the USB port on the display unit can occur only when the Remote PC Access Window is displayed. In such a scenario, there is no need to pop up a keypad.



13 Click the [Switch] tab. Select the [Enable the RPAWindow Display Switch] check box. Set each item on [Switch Label] and [Switch Color] if necessary.

💰 Remote PC Access	Window Display	×
Parts ID RW_0000 Comment	Basic Switch	
ABC Select Shape	Switch Label Font Type Standard Font  Display ASCII Text Color 7 Switch Color Border Color 7 Display Color 2 Pattern None	Label Production State Confirmation Screen Blink None V Blink None V V
Help ( <u>H</u> )		OK ( <u>0</u> ) Cancel

NOTE	• Only the [Switch] tab is displayed when [Activate Switch] is selected as the [Type]. In case of a bit trigger, designate the ON switch for the bit by [Remote PC Access Bit Address], D-Script, Logic Program etc.			
		Type Remote PC Access Trigger Bit Address	Bit Trigger Bit Trigger Activate Switch	
		et this switch by [S <sub>I</sub> Display Switch].	pecial Switch] for switch parts and [RPA	

<sup>(G)</sup> "11.14.4 Special Switch" (page 11-59)

#### 14 Click [OK].

	· · · · · · · · ·			
		Pro	duction Sta	ite
		, por	nfirmation S	screen 
· · · ·				

**15** Transfer the system settings.



#### 36.3.3 Operation Procedure

1 When you touch [RPA Window Display Switch], the RPA window screen and the server computer screen is displayed.



2 You can scroll the screen area that cannot be displayed in the remote PC access window display with the scroll bar.

1	🚞 WINDOWS					Confir
My Documen	File Edit View Favorites T	ools Help				
	🔆 Back 🔹 🕥 🖌 🏂 🔎	Search 🛛 🦻 Fold	ters 🛛 🍰 🎾	× 9	•	
	Address 🛅 C:\WINDOWS					
My Compute	Name 🔺	Size	Туре	Date	Modified	Scroll Bar
	Config		File Folder	10/2/	/2006 7:06 AM	
	Connection Wizard		File Folder	10/2/	/2006 7:06 AM	
	Cursors		File Folder	10/2/	/2006 2:44 PM	
My Network	🚞 Debug		File Folder	10/2/	/2006 7:14 AM	
Places	훝 Downloaded Program Files		Folder	11/17	7/2006 4:14 PM	
	Driver Cache		File Folder	10/2/	/2006 7:06 AM	
1	🚞 ehome		File Folder	10/2/	/2006 7:13 AM	
<b>1</b>	Conts Conts		File Folder	11/7/	/2006 2:58 PM	
Recycle Bin	🛅 Help	C:\WIN	DOWS\system3	2\cmd.exe	2	
	Cie7		IP Address			
×						S

**3** When you want to input from the keyboard, touch the KBD button to display the keypad associated with the [Remote PC Access Window Display].

4 S Touch to display the system buttons needed for input by the keypad.

```
      ESC SHFTCTRL ALT FN ← → ↑ ↓ UP Down R/L Zin Zoot

      NOTE

      • Please refer to the following for details on the system button keys.

      ☞ "36.4.3 Remote PC Access Window Display Setting Guide" (page 36-21)
```

5 To close the window, touch the [RPA Window Display Switch] again or touch the imes button. If you start the remote PC access window display by the "Bit Trigger", the bit address turns OFF automatically when the imes button is pushed.

# 36.4 Settings Guide

## 36.4.1 Remote PC Access Window Display Settings Guide

## Basic Settings

💰 Remote PC Access	Window Display	×
Parts ID	Basic	,
RW_0000 📑 Comment	Remote PC Access Window Number	1
	Туре	Bit Trigger
	Remote PC Access Trigger Bit Address	[PLC1]X00000
	Remote PC Access server address	
	Port	5900
	Password	
	Server Display Scaling	Actual size
	🔲 Window Interchange	
	Enable Popup Keypad	
	<ul> <li>Full keypad</li> </ul>	🔿 Numeric keypad
Help ( <u>H</u> )		OK ( <u>O</u> ) Cancel

Setting	Description
Parts ID	Placed parts are automatically assigned an ID number. Key part ID : RW_****(4-digit numbers) Alphabetic parts are fixed. Numeric parts can be changed within the range of 0000 - 9999.
Comment	The comment for each Part can be up to 20 characters long.
Remote PC Access window number	The RPA window screens for display are assigned 1 to 8 automatically in the order of RPA window display allocation.
Туре	Select the trigger method for the RPA Window Screens from [Bit Trigger] or [Activate Switch].
Remote PC Access trigger bit address	When you select [Bit Trigger] in [Type], set the bit address to control the start of window screens.
Remote PC Access server address	Set up the connected server with any IP address other than 0.0.0, 127.0.0.1, or 255.255.255.255.
Port	Set the port number of the destination server from 1024 to 65535.
Password	Set the password to connect the server software up to 30 letters characters. You need to set the same password as that for the UltraVNC software.
Server display scaling	Select the server screen size from [Actual size], [1/4 Display], or [1/9 Display].
Window Touch Behavior	When more than two RPA window screens are displayed, specify whether touches change the window overlap order.
Enable Popup Keypad.	Set whether to use the popup keypad.

Continued

Setting	Description
Setting Full keypad, Numeric keypad	<ul> <li>Select the displayed popup keypad from [Full keypad] or [Numeric keypad].</li> <li>Full keypad The text keypad for A - Z and the special keys such as ENT, Shift, Ctrl key etc. are displayed.</li> <li>Numeric keypad The numeric keypad (0-9), the arrow keys pointing right, left, up and down, and the Del and Ent keys are displayed.</li> </ul>
	<ul> <li>NOTE</li> <li>You cannot select or move the popup keypad display area when the remote PC access window display is grouped with another object.</li> </ul>

# Switch

💰 Remote PC Access	Window Display	X
Parts ID RW_0000	Basic Switch	-1
Comment	☑ Use Remote PC Access Window Switch	
ABC	Switch Label Font Type Standard Font  Label ON/ Display Language ASCI Text Color 7	
Select Shape	Switch Color Border Color 7 V Blink None V Display Color 2 V Blink None V Pattern None V	
Help ( <u>H</u> )	OK ( <u>O</u> ) Cancel	

Setting	Description
Select Shape	Open the Select Shape dialog box to choose the Part shape.
	Shape Browser
	Parts Palette     Standard Parts     Browse       State     State 0     Image: Compared to the state of the s
	Parts Number
	The color may not be changed according to shape.
Use Remote PC Access	Set whether or not to place switches for control of the remote PC
window switch	access window display or clear the remote PC access window
	display. The switches are placed on the top right of the remote PC
	access window display automatically. However you can select and move them individually.
	Continued

Continued

Setting		Description
Switch Label	Font Type	<ul> <li>Select the font type for display of the switch label.</li> <li>Standard Font You can set the vertical to horizontal ratio of the text with the bit map font in the magnification settings. The text contour may be grainy and blurred when you zoom in/out.</li> <li>Stroke Font The outline font has a fixed text ratio of vertical to horizontal (The font is defined by a combination of lines.). The text contour is displayed clearly when you zoom in/out. However, this puts a burden on the GP memory.</li> </ul>
	Display Language	Select the display language to display the switch label from [Japanese], [ASCII], [Chinese (Traditional)], [Chinese (Simplified)], [Korean], [Cyrillic] or [Thai].
	Text Color	Set the text color for the label.
	Label	Enter the text to display on the switch.
	Border Color	Set the border color, if you selected a shape with a border.
	Display Color	Select the switch color.
	Pattern	Select from [No Pattern] or 8 types of pattern.
Switch Color	Pattern Color	Select the color of the pattern, if you selected a pattern other than [Pattern], [No Pattern]. The switch color is displayed by [Display Color] and [Pattern Color].
	Blink	<ul> <li>Select the Part blink and blink speed. You can choose this for [Border Color], [Display Color], or [Pattern Color].</li> <li>NOTE</li> <li>• There are cases where you can and cannot set Blink depending on the Display Unit and System Settings' [Color].</li> <li>* "9.5.1 Setting Colors ■ List of Available Colors" (page 9-34)</li> </ul>

## 36.4.2 System Settings [Input Equipment Settings] - [Remote PC Access Input] Settings Guide



Setting	Description
USB Keyboard	Set whether to use the USB ports connected keypad when you operate the server screen from the display.
Japanese 10 Keypad Registration	6 Select when to enable keypad registration for Japanese.
English 101 Keypad Registration	Select when enabling keypad registration for English.
USB Mouse	Set whether to use the USB ports connected to the mouse when you operate the server screen from the display.
Sensitivity	Adjusts the sensitivity of the USB mouse.

# 36.4.3 Remote PC Access Window Display Setting Guide



NOTE

• You cannot change the button size, location. on the window screen displayed on the remote PC access window display.

Setting	Description
KBD	Define popup keypad use.
Menu Bar	[Show/Hide Popup Keypad], [Close the Window] buttons are displayed.
Close Window Screen 🗙	Close the RPA display window. If you started [Bit Address] on the RPA display window, push the [Close the Window] button to turn OFF the bit address.
Scroll Bar	<ul><li>When you touch the yellow area, the scroll bar moves 10 dots at a time.</li><li>When you scroll by touching the black part, the screen moves page by page.</li><li>When you the green area, you can move the screen by dragging the mouse.</li></ul>
Display Area	Display the contents of server computer.

Continued

Setting	Description
System Button	The system button shown in the example appears when the display unit is connected to the server PC and a system button is touched. When the current state is ON the button appears yellow, and when OFF it appears gray.
[ESC]	Cancels the operation. The exact details about how [ESC] behaves depends on the application.
[SHIFT]	You can input the [SHIFT], [CTRL], and [ALT] keys. However, you are
[CTRL]	unable to hold keys down.
[ALT]	
[Fn]	You can input function keys. When Fn is ON, touch a number key to input a function key.
$[\leftarrow] [\rightarrow] [\uparrow] [\downarrow]$	Move cursor
[Up] [Down]	Use for moving [Up] [Down].
[R/L]	Touch to emulate right and left mouse clicks. When R/L is ON, you can emulate right-click of the mouse; when R/L is OFF, you can emulate left-click of the mouse.
[Zin]	Zoom in server display.
[Zout]	Zoom out server display.

# 36.5 Restrictions

- If you input the wrong key code, the key code will not be set. Input the correct key code.
- If you do not enter a valid key code and the Remote PC Access function is set up, when you save the project a message appears indicating the key code is not set up. Without the key code, you cannot transfer the project.
- Select [Yes] when the following window screen is displayed upon transferring. If you select [No], the remote PC access window cannot be displayed because the key code information is not transferred.



- The server computer display data is displayed with a color number decreased according to the color specified in the display unit.
- If you set the USB keyboard to be used with [Input Device Settings], [RPA Input] other than the RPA feature, the settings will not be not used.
- The Remote PC Access Window may not be able to display everything viewed on the server PC. For example, protected movies from a Web site will not appear on the display unit.
- There may be a short time delay between the GP display and the display on the server computer. For example, in the [Date and Time Properties], the seconds display for the [Time (T)] object may not match.
- Using the Remote PC Access feature, if you set the Orientation to [Portrait], the screen is displayed the same as [Landscape]. Set [Orientation] to [Landscape].
- When displaying the Remote PC Access Window, overall performance is reduced.
- You can connect each USB keyboard or USB mouse for remote PC access input.
- To connect or disconnect with the server computer may take time. The RPA display window is displayed as a black screen while connecting.
- On the server PC, make sure the display settings are set to 16 bit color quality. In the Windows Control Panel's [Display Properties] dialog box, see the [Settings] tab. Other color settings will prevent the display unit from connecting and cause connection errors.

## 36.5.1 Remote PC Access Window Display Restrictions

- You can set up one Remote PC Access Window Display on one screen. Do not use [Call Screen] or any other features and display multiple Remote PC Access Window Displays. The entire project is limited to eight displays.
- You can set the remote PC access window display for only base screen display. The remote PC access window display does not work on the window screen.
- In "Bit Address", the window opens when the bit is ON, and closes when the bit is OFF. To turn ON or OFF the start bit takes more than one communication cycle or display scan time to find the bit state.
- Remote PC access window display uses one local window. Therefore, you can display up to 2 (if you use the global window in the local window, you can display up to 3.) on the window parts and remote PC access window display at the same time. If you display 2 on the window parts, you cannot display on the remote PC access window display.
- If you display the remote PC access window display, only one window part can be allocated to the same screen. The start sequence for the window part and the remote PC access window display must have the start bit turn on first. If the start bit is turned on at the same time, which parts will be displayed first cannot be controlled.
- Remote PC access window display is displayed in the same direction as [Landscape], even if you set [Portrait] in for the [Orientation].

## 36.5.2 Remote PC access window display Restrictions

- You cannot change the size or contents of the window settings displayed on the remote PC access window display.
- If the displayed window size and display position on the remote PC access window display exceeds the display range, it will be automatically displayed within the display range. The popup keyboard is also displayed within the display range. The order is as follows.
  - (1) Change the display position to display the whole window screen.
  - (2) If the window screen exceeds the display range, change the window screen size.



- If you specify a remote PC access window display other than the supported models, even if you save the screen, the settings cannot be used.
- Connection and disconnection to the server computer may take time. The remote PC access window display is displayed in black until connected. The extra space is displayed in black if the server computer display is smaller then the remote PC access window display when displayed on the server computer.
- Even if the window designated [Continuous Read] is not displayed, if it is set at the max display number (2 for using the global window, 3 for only local window), then the RPA window screen cannot be displayed.

Refer to the following for show window restrictions.

"18.8.2 Restrictions for Window Displays" (page 18-29)

## 36.5.3 Server Computer Connection Restriction

- The GP is not able to connect to the server PC when it uses the Windows Firewall.
- The time-out of the server computer and display unit is set at 75 seconds. If you cannot connect with the server computer, the display unit searches the network for 75 seconds and the remote PC access window display appears as a black screen. After 75 seconds, the error message "The server cannot be found, or unable to connect to server" appears.
- If you cannot connect even after the display unit connects to the server (for example, the IP address of the server cannot be found or a cable is unplugged), you cannot restart the server computer or input to the RPA window screen for up to 75 seconds.
- If you cannot connect to the server computer (for reasons such as a disconnected cable), you cannot update the RPA window screen display or input because the connection times out based on the time-out settings on the server computer. In this case, the time-out error message is not displayed on the server computer. Turn off the remote PC access window display to end the RPA connection.
- If you cannot connect to the server computer, you can update the screen and operate if the connection is recovered before the server times out. The input entered during the disconnection is sent to the server computer after the connection is recovered.
- If communication between the GP and server PC fails after a connection had been established, turn off the Remote PC Access Window Display. However, you will also be unable to use the Remote PC Access Window Display on other server computers for up to 75 seconds. If you restart the Remote PC Access Window Display, a message appears indicating the connection to the Remote PC Access server is in progress.
- While you cannot connect to the server, even if you shift to offline mode or transfer project (when it is not reset by automated transfer) then shift back to online, you cannot connect to the server up to 75 seconds after connecting to the RPA. After returning to online and starting the remote PC access window display, the error message "Connection to the server in progress" appears on the display unit.
- When the Remote PC Access server connection is not established, you cannot run the LAN self-diagnosis check in the offline mode's [Maintenance Menu]. After the Remote PC Access server connection is made, wait 75 seconds and then check the LAN ports.

# 36.5.4 RPA Popup Keypad Restrictions

- If the special window screen (such as the popup keypad for data display parts) is displayed first, the keypad registration is not displayed when you touch the keypad for the RPA window screen. However, if the keypad registration for the RPA window screen is displayed, the special window screen can be displayed and operated. Refer to the following for the special window screen.
  - 18.8.2 Restrictions for Window Displays Displaying Multiple Windows on a Single Screen 18-30
- The popup keypad closes when you change screens, turn off the RPA display window, or go to offline mode.
- You cannot use the auto repeat input the function for inputting while holding down the key with the popup keypad.
- The [Single Byte/Double Byte] key is displayed only when in the [System Settings] [Display Unit] [Menu and Error Settings] [System Language] is set to Japanese.
- The popup keypad display is not supported when the display unit's [Orientation] is set to [Portrait].
- When [Caps Lock] is enabled on a USB keyboard, it affects inputs to the popup keypad (type as if the [Shift] key is pressed).
- When [Caps Lock] is enabled on a popup keypad and you type [Ctrl]+any key, it inputs [Ctrl]+[Shift]+any key. When typing [Alt]+any key, it inputs [Alt]+[Shift]+any key.

## 36.5.5 USB Keyboard for RPA Restrictions

- You cannot use the USB ports keyboard and USB bar code at the same time.
- Only Japanese and English keyboard are accepted for the external connection keyboard.
- You can use the popup keyboard for RPA at the same time, however keys such as Shift and Caps Lock will be separate on each keyboard.
   For example, when you input "A" using the popup keyboard for RPA when the Caps Lock on the USB keyboard is ON, if the Caps Lock on the popup keyboard for RPA is OFF, "a" is displayed.
- Even if the window screen is displayed on top of the show window on the remote PC access window display, you can input on the keyboard. However, the remote PC access window display is not displayed on top automatically when you start to input on the keyboard.
- You can connect only one USB keyboard.
- If you attempt to [Enable] a USB keyboard other than the RPA feature models, the settings cannot be used.
- You cannot use the auto repeat input (function for input while holding down the key) by the USB keyboard.
- When using a USB keyboard, if you type a large amount of data at one time, some of the characters input may be dropped or keys might remain depressed. For example, if you continuously toggle between the [Alt] and [Ctrl] keys, they system buttons [ALT] and [CTRL] may remain colored yellow. When a key remains depressed, close then redisplay the Remote PC Access Window.
- Using the USB keyboard, the [Convert], [Do not convert], [katakana], and [hiragana] keys on a Japanese 106 keyboard do not work.
- In normal computer operations, when you push the numeric keypad while holding down the Shift key with NUMLock ON, the cursor moves. However, when you use the RPA feature, it is same as pushing the numeric keypad while holding down the Shift key with NUMLock OFF to select the cursor.
- In normal computer operations, if you push the cursor key with ScrollLock ON, the page moves. However, when you use the RPA feature, the cursor moves one line at a time the same as the normal cursor key.
- When the display unit is off because it's in standby mode, typing from the USB keyboard will cause the display to turn back on.

## 36.5.6 USB mouse for RPA Restrictions

- You can only input the right button, left button, wheel button, wheel coordinates and mouse coordinates with the USB mouse. If you use a higher function mouse, you cannot operate the other functions, such as back and forward.
- You can connect only one USB mouse.
- The red frame in the following illustration indicates how much you can move the mouse cursor.



- Even if the window screen is displayed on top of the show window on the remote PC access window display, you can input with the mouse. However, the remote PC access window display is not automatically displayed on top when you start inputting with the mouse.
- If you specify a USB mouse other than the RPA feature models to be used in [Input Device Settings], [RPA Input], the settings cannot be used.
- When the display unit is off because it's in standby mode, inputs from the USB mouse will cause the display to turn back on.
- When you use a USB mouse connected to the display unit, the mouse cursor might leave a trail, but this does not appear on the server PC.
- When there is a communication error between the Remote PC Access Window Display and another object on the same screen, the Remote PC Access Window Display will not run. Either restore the communication error, or draw the Remote PC Access Window Display on its own screen.