2 Preparation

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2.1 Items to Check

Before installing this product, ensure that the following prerequisites are completed.

2.1.1 Preparing the Computer

Installing Pro-Server EX

After confirming the computer you are planning to install the software onto is compatible with the operating environment, run the install. If the computer you are using is not compatible with the Pro-Server EX operating environment, the software may not work properly.

For details about the operating environment, see " OPERATING ENVIRONMENT 1-8".

If the trial version is installed, see "1.5 About the Trial Version".

Application Software

Check that the software required by the Pro-Server EX feature you want to use is installed. For supported software, refer to "OPERATING ENVIRONMENT".

Windows Firewall

Depending on your operating system, there are cases when a message displays indicating the Windows firewall is blocking communication. In those instances, set up the [Check firewall status].

If "Release Block" does not display, use the Control Panel's [Check firewall status] command to set up the following.

• Depending on the operating system you are using, the display and part names may differ. If so, replace the names with those with similar features used in your system configuration.

1 From the Control Panel, select [Check firewall status] and then [Allow a program or feature through Windows Firewall] to display the [Allowed Programs] page.



- 2 From [Change Settings], select [Allow another program].
- 3 In the [Add a Program] dialog box, select the Pro-Server EX and Pro-Studio EX applications, and click [Add].
- 4 Select the domain and other settings as required by your environment, and click [OK].

2.1.2 Necessary Equipment

LAN Hub

Used to connect all the Ethernet cables together. A LAN hub is necessary even when connecting one PC and one display unit (one-to-one connection).



- Prepare equipment that conforms to the communication specifications of the PC and display unit Ethernet ports.
- The minimum number of ports required is a sum of PCs and display units to be connected. When the ports are not enough, prepare plural LAN hubs and make a cascade connection. Refer to the operation manual of the LAN hub for the connection method.



Ethernet Cable (straight cable)

Used to connect the PC and the display unit



- This cable is necessary even when connecting one PC and one display unit (one-to-one connection) since a LAN hub is used even in this case. When you use a cross cable for connection, we do not guarantee the operation.
- The minimum number of cables required is a sum of PCs and display units to be connected. Prepare equipment that conforms to the communication specifications of the PC and display unit Ethernet ports.

Network Adapter (LAN board/LAN card)

Used by attaching to the PC.



(Illustration shows a LAN board)

- When the Ethernet port for system connection has been preinstalled on the PC, it is not necessary to attach a network adapter.
- Follow either appropriate method below to attach the network adapter to the PC. Refer to the operation manual of the PC or the network adapter for more details about attaching method.
 - Attach a LAN board to the expansion slot of the PC.
 - Attach a LAN card to the PC card slot of the PC.

2.2 Connecting PC with display unit

The following explains how to connect the PC and the display units using Ethernet cables.

Connect Ethernet cables to the PC and the display units separately, and then connect them together using a LAN hub as shown below.

Example: Connecting three display units and one PC



2.3 Setting PC Network

The following explains how to connect the PC to the display units via a network (Ethernet).

Necessary settings are:

- Operation check of the network adapter (LAN board/card); and
- Setting of TCP/IP protocol

What is TCP/IP protocol?

One of the network protocols (standards regarding communication such as communication speed, and communication method). TCP/IP protocol is a combination of "TCP" (Transmission Control Protocol) and "IP" (Internet Protocol). This protocol is used on the Internet and electronic mails, and is the most popular protocol currently used.

Setting methods differ depending on the OS installed on the PC.

- 2.3.1 In Case of Using Windows Vista or later
- 2.3.2 In Case of Using Windows XP

2.3.1 In Case of Using Windows Vista or later

IMPORTANT • Log on to Windows with the user name of "Credential Manager" or of the equivalent administrator authority. Refer to the operation manual of the OS for user authority.

NOTE • Depending on the operating system you are using, the display and part names may differ. If so, replace the names with those with similar features used in your system configuration.

1 Operation Check of Network Adapter

Check that the network adapter (LAN board/LAN card) attached to the PC performs correctly using the "Device manager" of Windows.

- (1) Turn on the PC power and start Windows.
- (2) Follow the steps for your operating system, and open the [Device Manager].

• The [User Account Control] dialog box may be displayed. When it is displayed, click the [Continue] button.

(3) On the "Device Manager" screen, double-click the "Network Adapter" in the list of the hardware devices displayed.

Confirm that the name of the network adapter being attached to the PC is displayed.



• The "x" mark or "!" mark displayed at the head of the name shows that the network adapter is not performing correctly. Take actions so that the network adapter performs correctly referring to the operation manual of the network adapter, etc.

(4) Click the [x] (close) button to close the "Device Manager" screen.

2 Setting of TCP/IP protocol

MPORTANT
 Contact the network administrator before operation.

(1) Open [Network and Sharing Center].

(2) Click [Manage Network Connections] on the displayed screen. (When using Windows 7 or Windows 8 / 8.1 click [Change adapter settings].)



(3) On the "Network Connection" screen, right-click the "Local Area Connection" icon, and then select

"Properties" from the menu.



• The [User Account Control] dialog box may be displayed. When it is displayed, click the [Continue] button.

(4) On the "Local Area Connection Properties" dialogue, confirm that the check box of the [Internet Protocol Version4 (TCP/IPv4)] in [This connections uses the following items] is turned on.

If not, click the check box to turn on.

📱 Local Area Connection Properties		
Networking Sharing		
Connect using:		
Proadcom NetXtreme 57xx Gigabit Controller		
Configure		
This connection uses the following items:		
Algo S Packet Scheduler Brie and Printer Sharing for Microsoft Networks Algorithm Protocol Version 6 (TCP/IPv6) Algorithm Protocol Version 4 (TCP/IPv4) Algorithm Protocol Version 4 (TCP/IPv4)		
Install Uninstall Properties		
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.		
OK Cancel		

(5) Select [Internet Protocol Version4 (TCP/IPv4)], and then click the [Properties].

🖗 Local Area Connection Properties		
Networking Sharing		
Connect using:		
Proadcom NetXtreme 57xx Gigabit Controller		
Configure		
This connection uses the following items:		
Client for Microsoft Networks		
QoS Packet Scheduler		
File and Printer Sharing for Microsoft Networks		
M A Internet Protocol Version 6 (TCP/4Pu6)		
Internet Protocol Version 4 (ICP/IPV4)		
Link-Layer Topology Discovery Responder		
Install Uninstall Properties		
Description		
Transmission Control Protocol/Internet Protocol. The default		
across diverse interconnected networks.		
OK Cancel		

(6) In the [Internet Protocol Version4 (TCP/IPv4) Properties] dialogue, select [Use the following IP address], and then enter the IP address of the PC into the [IP address] field.

Internet Protocol Version 4 (TCP/IPv4)	Properties 💦 🔀	
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
Obtain an IP address automatical	y	
• Use the following IP address:		
IP advress:	192.168.0.1	
Subnet mask:	· · ·	
Default gateway:	· · ·	
Obtain DNS server address automatically		
Ouse the following DNS server add	resses:	
Preferred DNS server:		
Alternate DNS server:	• • •	
	Advanced	
OK Cancel		

What is IP address?

Internet protocol numerical address assigned to each computer on the network so that its location and activities can be distinguished from other computers. The IP address takes the form of four numbers separated by dots, for example: 192.168.0.3

(7) Click the [Subnet Mask] field, and the subnet mask will be entered automatically. If necessary, change the subnet mask, and then click the [OK] button.

internet Pi	otocol Version 4 (TCP/IPv4)) Properties 🔹 😵 💽
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
) Ot	tain an IP address automatica	ally
O Us	e the following IP address: —	
IP ad	dress:	192 168 0 1
Subn	et mask:	255 . 255 . 255 . 0
Defa	ult gateway:	· · ·
Obtain DNS server address automatically		
Use the following DNS server addresses:		
Prefe	erred DNS server:	
Alter	nate DNS server:	• • •
		Advanced
OK Cancel		

- If no relay device to the other network such as a router is connected, it is not necessary to input NOTE about [Default Gateway].
 - If the subnet masks for PC and display unit are different, display unit is not displayed in the list when finding node.

What is Subnet Mask?

The subnet mask is used to determine what subnet an IP address belongs to. An IP address has two components: the network address that represents the network being connected and the host address that is used to distinguish individual device.

For example, consider the IP address "192.168.2.1" and the Subnet Mask "255.255.255.0". Each address in a binary pattern is:

IP address	: 11000000.10101000.00000010.00000001
Subnet Mask	: 11111111.11111111.11111111.00000000

In the IP address, the part shown in a logical "1" in the Subnet Mask represents the network number, and the part shown in a logical "0" in the Subnet Mask represents the host number. Accordingly, the areas allocated for the network number and the host number in the IP address "192.168.2.1" are as follow. IP Address

: 11000000 . 10101000 . 00000010 . 00000001

- Network number Host number
- (8) If necessary, perform the setting related to DNS server.

(9) Click the [OK] button to close the "Properties of Local Area Connection" dialogue.

- (10) Click the [x] (close) button to close the "Network Connection" dialogue.
- (11) Reboot the PC to enable the setting.

This completes the network setting.

2.3.2 In Case of Using Windows XP

· Log on to Windows with the user name of "Credential Manager" or of the equivalent IMPORTANT administrator authority. Refer to the operation manual of the OS for user authority.

1 Operation Check of Network Adapter

Check that the network adapter (LAN board/LAN card) attached to the PC performs correctly using the "Device manager" of Windows.

(1) Turn on the PC power and start Windows.

(2) On the desktop, right-click the "My Computer" icon, and then select "Properties" from the menu.



(3) On the "System Properties" dialogue, click the [Hardware] tab, and then the [Device Manager] button.

System Properties 🔹 💽 🔀
System Restore Automatic Updates Remote General Computer Name Hardware Advanced
Device Manager The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device. Device Manager
Drivers Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers. Driver Signing Windows Update Hardware Profiles Undown and the sum for up to the sum
Hardware profiles provide a way to you to set up and store different hardware configurations. Hardware Profiles OK Cancel Apply

(4) On the "Device Manager" screen, double-click the "Network Adapter" in the list of the hardware devices displayed.

Confirm that the name of the network adapter being attached to the PC is displayed.

🖴 Device Manager	
File Action View Help	
E- 🚇 FIT-91636F48E4B	
🕀 🔡 Computer	
🗈 🍲 Disk drives	
🕀 💆 Display adapters	
DVD/CD-ROM drives	
Floppy disk controllers	
E Sk drives	
IDE ATA/ATAPI controllers	
H Skeyboards	
Mice and other pointing devices	
Monicors	
Willimotia Audio Controllor	
Device (COM 9.1 PT)	
Sound video and game controller:	
Storage volumes	
H System devices	
Universal Serial Bus controllers	

NOTE • The "x" mark or "!" mark displayed at the head of the name shows that the network adapter is not performing correctly. Take actions so that the network adapter performs correctly referring to the operation manual of the network adapter, etc.

(5) Click the [x] (close) button to close the "Device Manager" screen.

(6) Click the [OK] button to close the "System Properties" dialogue.

2 Setting of TCP/IP protocoll

	Contact the network administrator before operation.
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(1) Click the [Start] button in the task bar, and then select the "Network Connection" from "Settings".)



(2) On the displayed screen, right-click the "Local Area Connection" icon, and then select "Properties" from the menu.



(3) On the "Local Area Connection Properties" dialogue, confirm that the check box of the [Internet Protocol (TCP/IP)] is turned on.

If not, click the check box to turn on.

🚣 Local Area Connection 2 Properties 🛛 📪 🗙		
General Authentication Advanced		
Connect using:		
Broadcom NetXtreme 57xx Gigabit C Configure		
This connection uses the following items:		
Client for Microsoft Networks Pile and Printer Sharing for Microsoft Networks QoS Packet Scheduler Torrent Protocol (TCP/IP)		
Install Uninstall Properties Description Allows your computer to access resources on a Microsoft network.		
 Show icon in notification area when connected Notify me when this connection has limited or no connectivity 		
OK Cancel		

(4) Select [Internet Protocol (TCP/IP)], and then click the [Properties].

🚣 Local Area Connection 2 Properties 🛛 🔹 🔀		
General Authentication Advanced		
Connect using:		
Broadcom NetXtreme 57xx Gigabit C Configure		
This connection uses the following items:		
Install Uninstall Properties		
Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.		
 Show icon in notification area when connected Notify me when this connection has limited or no connectivity 		
OK Cancel		

(5) In the [Internet Protocol (TCP/IP) Properties] dialogue, select [Use the following IP address], and then enter the IP address of the PC into the [IP address] field.

nternet Protocol (TCP/IP) Propert	ies 🤗 🗙	
General		
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
Obtain an IP address automatic	ally	
e the following IP address: -		
IP address:	192.168.1.100	
Subnet mask:		
Default gateway:	· · · ·	
C Obtain DMC conver address avt	onationly	
O Ustan DNS server address aut O	ddresses:	
Preferred DNS server:		
Alternate DNS server:	· · ·	
	Advanced	
	OK Cancel	

What is IP address?

Internet protocol numerical address assigned to each computer on the network so that its location and activities can be distinguished from other computers. The IP address takes the form of four numbers separated by dots, for example: 192.168.0.3

(6) Click the [Subnet Mask] field, and the subnet mask will be entered automatically. If necessary, change the subnet mask, and then click the [OK] button.

Internet Protocol (TCP/IP) Properties 🛛 📪 🗙						
General						
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.						
C Obtain an IP address automatically						
Use the following IP address:						
IP address: 192.168.1.100						
Subnet mask: 255 . 255 . 0						
Default gateway:						
C Obtain DNS server address automatically						
☐ Use the following DNS server addresses:						
Preferred DNS server:						
Alternate DNS server:						
Advanced						
OK Cancel						

- If no relay device to the other network such as a router is connected, it is not necessary to input about [Default Gateway].
 - If the subnet masks for PC and display unit are different, display unit is not displayed in the list when finding node.

What is Subnet Mask?

In the IP address, the part shown in a logical "1" in the Subnet Mask represents the network number, and the part shown in a logical "0" in the Subnet Mask represents the host number. Accordingly, the areas allocated for the network number and the host number in the IP address "192.168.2.1" are as follow.

IP Address : <u>11000000 . 10101000 . 00000010</u> . <u>00000001</u> Network number Host number

(7) If necessary, perform the setting related to DNS server.

(8) Click the [OK] button to close the "Properties of Local Area Connection" dialogue.

(9) Click the [x] (close) button to close the "Network Connection" dialogue.

(10) Reboot the PC to enable the setting.

This completes the network setting.

2.4 Set the network of display unit

The following explains how to connect the display units via a network (Ethernet).

This section explains thow to configure Ethernet settings for a display unit directly out of the box. For information on how to check or edit Ethernet settings after you transfer a screen project file to the display unit, refer to the corresponding user documentation for the screen editing software.

NOTE • Depending on the operating system you are using, the display and part names may differ. If so, replace the names with those with similar features used in your system configuration.

1 Turn on the display unit's power.

After a while, the "Initial Transfer Mode" screen or the "Welcome" screen will appear on the monitor of the display unit.

Initial Start Mode						
Language	ENGLISH					
Thank you for you	r purchasing.					
To initialize this	To initialize this unit, please download the					
Runtime system fro	om the editor.					
Note:Touch the Et	nernet Setup Switch					
to change the IP :	address.					
	all the second s					
	Ethernet Setup					

2 Touch the [Ethernet Setting] button.

The "Ethernet Setting" screen will appear. This screen displays default settings.

IP Address:	10	***	-	***
	311.51			
Subnet Mask:	255	Ø	0	0
Default Gateway:	0	0	0	0
Port:		Alt for	8000	

3 Enter the numbers of the IP address, Subnet Mask, Default Gateway and Self Node, and then touch the [Set] button.

Contact the network administrator for the values to set.

NOTE	•	If no relay device to the other network such as a router is connected, it is not necessary to input
		about [Default Gateway].

This completes the network setting of the display unit.