



LAN Connection Type I/O unit

# WCP-232-EXL

INSTRUCTION MANUAL V1.10

Please use this operation manual correctly on reading well.  
Please keep it carefully to be able to read immediately, when required.



# Table of Contents

<b>1. Overview .....</b>	<b>1</b>
<b>1-1. Introduction .....</b>	<b>1</b>
<b>1-2. Main Unit and Accessories .....</b>	<b>1</b>
<b>1-3. Safety Precautions (Be Sure to Read This).....</b>	<b>2</b>
<b>1-4. Outline.....</b>	<b>4</b>
<b>2. Specification.....</b>	<b>5</b>
<b>2-1. WCP-EXL.....</b>	<b>5</b>
<b>2-2. WCP-232.....</b>	<b>5</b>
<b>3. Parts Name and Explanation .....</b>	<b>6</b>
<b>3-1. WCP-EXL.....</b>	<b>6</b>
<b>3-2. WCP-232.....</b>	<b>7</b>
<b>4. Dimensions.....</b>	<b>8</b>
<b>4-1. WCP-EXL.....</b>	<b>8</b>
<b>4-2. WCP-232.....</b>	<b>8</b>
<b>5. Installation Method .....</b>	<b>9</b>
<b>5-1. Machine Installation.....</b>	<b>9</b>
<b>5-2. LAN Port.....</b>	<b>10</b>
<b>5-3. Communication connector .....</b>	<b>11</b>
<b>5-4. Installation of WCP-EXL and WCP-232.....</b>	<b>12</b>
<b>5-5. Connection to I / O terminal block .....</b>	<b>12</b>
<b>5-6. I / O terminal block circuit configuration.....</b>	<b>13</b>
<b>6. Prepare to Start Communication.....</b>	<b>14</b>
<b>6-1. Installation of "Device Installer" .....</b>	<b>14</b>
<b>6-2. Factory Default IP Address .....</b>	<b>14</b>
<b>6-3. IP Address Settings and Procedure.....</b>	<b>14</b>
<b>7. How to Use.....</b>	<b>21</b>
<b>8. After Service and Warranty .....</b>	<b>22</b>

# 1. Overview

## 1-1. Introduction

This instruction manual describes the information required for using this product including overview, installation, and operation of this product. Read this manual carefully before using this product. Keep this manual handy so that you can take it out immediately.

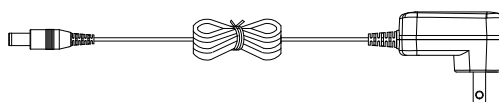
- Do not use this product for the application that may cause harm to human body or damage to other devices and equipment.  
Do not use this product near the devices that may malfunction due to radio waves emitted from this product.

## 1-2. Main Unit and Accessories

### ■LAN conversion unit 「WCP-EXL」

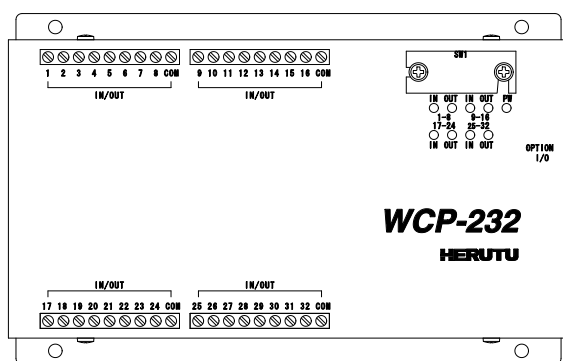


Conversion unit body ×1

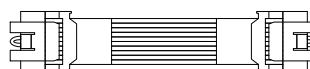


Cable Approx. 1.5 m  
AC adapter “ADB12100L” ×1

### ■I/O unit 「WCP-232」



I / O unit body ×1



Cable Approx. 5 cm  
Connection cable ×1

### 1-3. Safety Precautions (Be Sure to Read This)

This section describes the matters to be observed in order to prevent harm to the users and other persons and damages to the property.

- The following marks and displays classify and describe the extent of harm and damage caused by failing to observe the display content and using this product wrongly.



#### Warning

This display column shows "a failure to do observe it could result in death or serious personal injury".



#### Caution

This display column shows "a failure to do observe it could result in only the personal injury or property damage".



#### Caution

- Common matters in handling

- Avoid using this product in the humid or dusty place. Dusts or water enters the product, which may cause the fault, fire, or electric shock.



- Handling this product

- This product is the wireless communication equipment made of precision parts. Do not disassemble or modify it. Or the accident or fault may occur.



#### Warning

- Handling this product

- Do not use this product for application that requires the extremely high reliability affecting the human life.



- Do not use this product in the area which the radio wave reaches or not.



- Handling the power supply

Be sure to observe the followings in order to prevent the accidents such as heat generation, damage, or ignition of AC adapter and power cord.

- Do not place the AC adapter and power cord close to fire or insert them into fire. Or they may be burst and ignited, resulting in the accident.










- Use the AC adapter and main body only at the specified power supply voltage in order to prevent burst and ignition accidents.





- Do not use the AC adapter and main body at the location where they easily get wet. Or the accidents including heat generation, ignition, or electric shock and faults may occur.



<ul style="list-style-type: none"> <li>Do not touch the AC adapter, main body, power cord, and outlet with wet hands. Or the accident such as an electric shock may occur.</li> </ul>	
<ul style="list-style-type: none"> <li>Do not damage the power cord. Short-circuit or heat generation may cause fire or electric shock.</li> </ul>	
<ul style="list-style-type: none"> <li>Do not use the power plug with dusts attached. Short-circuit or heat generation may cause fire or electric shock.</li> </ul>	
<ul style="list-style-type: none"> <li>Do not give a strong shock to the AC adapter. Or the accident or fault may occur.</li> </ul>	
<ul style="list-style-type: none"> <li>If you find a deformation in the AC adapter, do not use it. Or the accident or fault may occur.</li> </ul>	
<ul style="list-style-type: none"> <li>Do not charge the main body at the location where the flammable gas is generated. Or the ignition accident may occur.</li> </ul>	
<ul style="list-style-type: none"> <li>Never disassemble the AC adapter. Or the accident or fault may occur.</li> </ul>	

■ Never disassemble the AC adapter.

Remove the power plug from the outlet because it may cause fire and electric shock. Request the dealer or our company to repair it.

<ul style="list-style-type: none"> <li>When smoke comes or there is a strange smell, immediately stop usage and remove the power plug from the outlet because it may cause fire and electric shock. Request the dealer or our company to repair it.</li> </ul>	
<ul style="list-style-type: none"> <li>If the cord is damaged, do not use it. Using the cord damaged continuously may cause fire or electric shock.</li> </ul>	

## 1-4. Outline

The LAN connection type I / O unit "WCP-232-EXL" is a product in which two units, the I / O unit "WCP-232" and the LAN conversion unit "WCP-EXL", are connected with the attached cable.

"WCP-232-EXL" is a LAN connection type I / O unit that can be used in combination with our Windows-compatible application "Production Process Support Software for Pokayoke Tools POKAYOKE plus" or "Production Process Support Software for WCL series WCL plus".

By connecting with POKAYAKE plus, it is possible to cooperate with manufacturing facilities such as "output work status (PASS/FAIL) to manufacturing equipment" and "real-time notification of input from manufacturing equipment to watch type transmission and reception device".

In addition, by connecting with WCL plus, it is possible to link with manufacturing facilities by "notifying the signal input from the manufacturing equipment and PLC with "vibration" message to a remote human and "real-time notification of input from the manufacturing facility to a watch type transmission and reception device".

### <feature>

1. The interface is Ethernet.
2. There are plenty of I/O points. (Input 16 points, output 16 points)
3. Up to 16 units can be connected to both "POKAYOKE plus" and "WCL plus".

## 2. Specification

### 2-1. WCP-EXL

Item	Specification
LAN port	Ethernet IEEE802.3 10Base-T/100Base-TX Auto switching Connector: RJ-45 × 1 Indication for network 2-color LED × 2
Communication connector	RS-232C × 1 Connector: MIL10 pole plug (for power supply)
Power Supply	DC12V (Available at AC100-240V with supplied AC adapter. )
Current Consumption	Approx. 120mA ( WCP-232 connection / DC12V input )
Operating Environment	Temperature:0-+40°C(32-104°F) Humidity:85%RH (without condensation)
External Dimensions	117W×67H×24Dmm (excluding protrusions)
Weight	Approx. 210g (AC adapter not included)

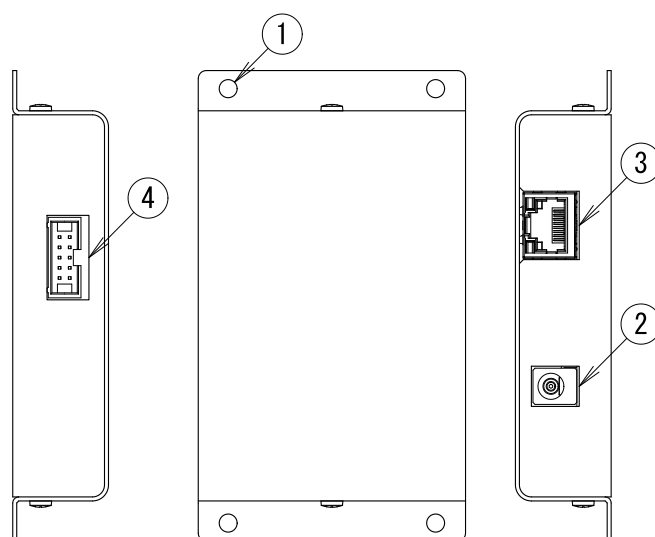
### 2-2. WCP-232

Item	Specification
Number of I / O terminals Block	16 input points (terminals 1-8, terminals 17-24) 16 output points (terminals 9-16, terminals 25-32) COM 4 points
I/O Terminal Specifications	Input Specifications : Non-Voltage Contact Input (Photocoupler current drive input) Input Logic : OFF=OPEN、ON= Short Circuit with COM
	Output Specifications : Transistor's Output (Open-Collector Output) Output Logic : OFF=OPEN、ON=Short Circuit with COM
Communication Connector	RS-232C Compliant×1 Connector MIL10 Pole Plus (Also used for Power Supply)
Display	POWER LED×1 (Red LED) IN LED×4 (Green LED)、OUT LED×4 (Red LED)
Power Supply	DC5V (Supplied from WCP-EXL communication connector)
Current Consumption	MAX 350mA (When applied with DC5V)
Operating Environment	Temperature : 0-+40°C Humidity : 85%RH (without condensation)
External Dimension	117W×185D×30H mm (excluding protrusions)
Weight	Approx. 550g



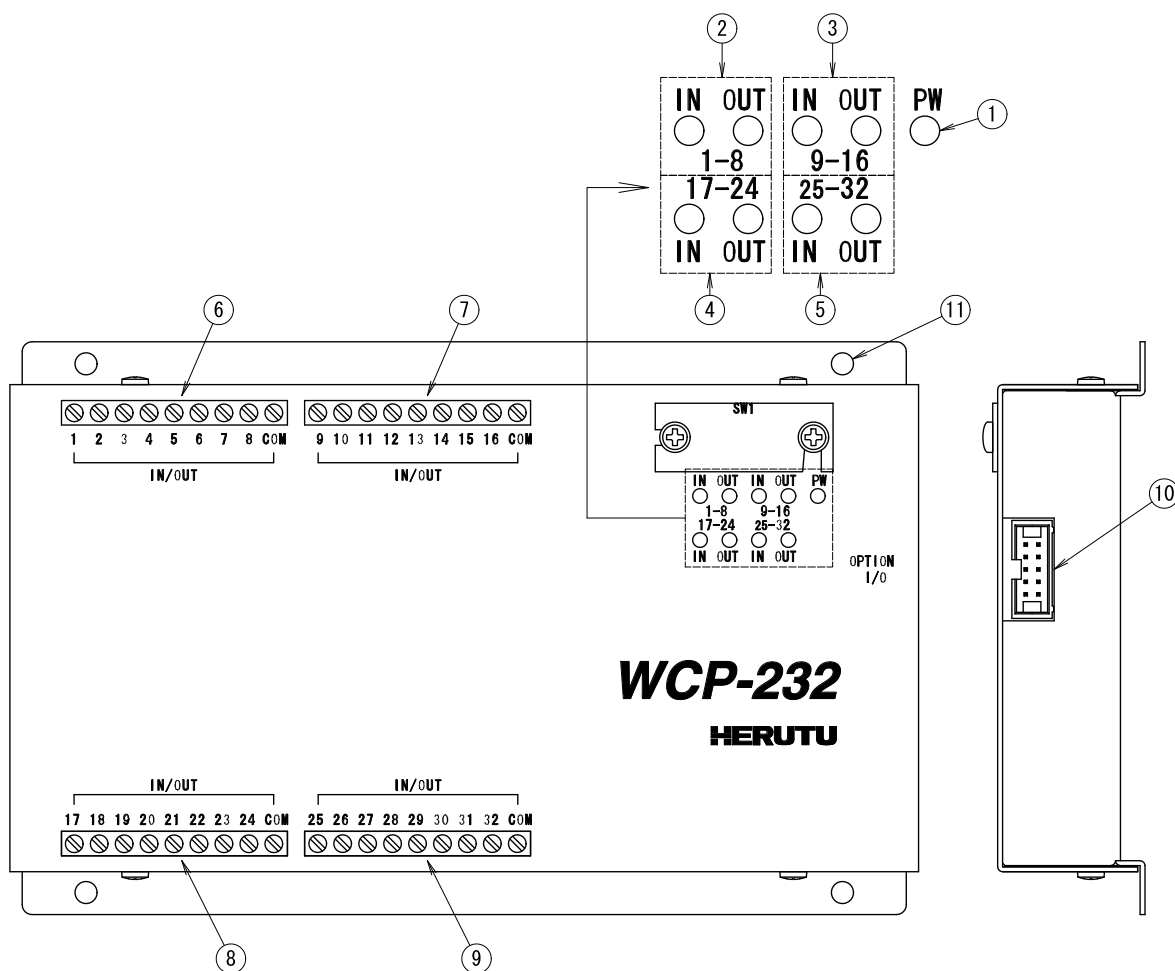
### 3. Parts Name and Explanation

#### 3-1. WCP-EXL



Name	Function
① Mounting Hole	Used when fixing WCP-EXL. There are 4 $\Phi 4.5$ holes.
② DC jack	Connect the included AC adapter to supply operating power for WCP-EXL and WCP-232. The polarity of the DC jack is center minus.
③ LAN Port	Connect the LAN cable and perform network communication.
④ Communication Connector	RS-232C Interface. Also used for power supply. Connect to WCP-232 with the attached cable.

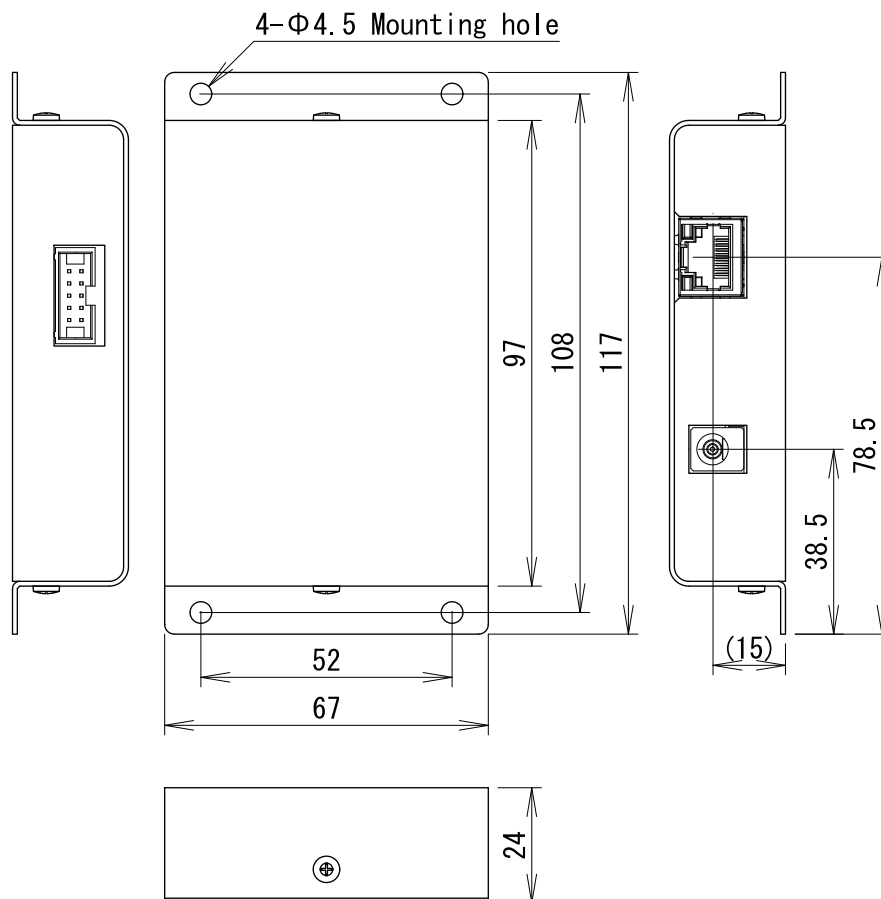
3-2. WCP-232



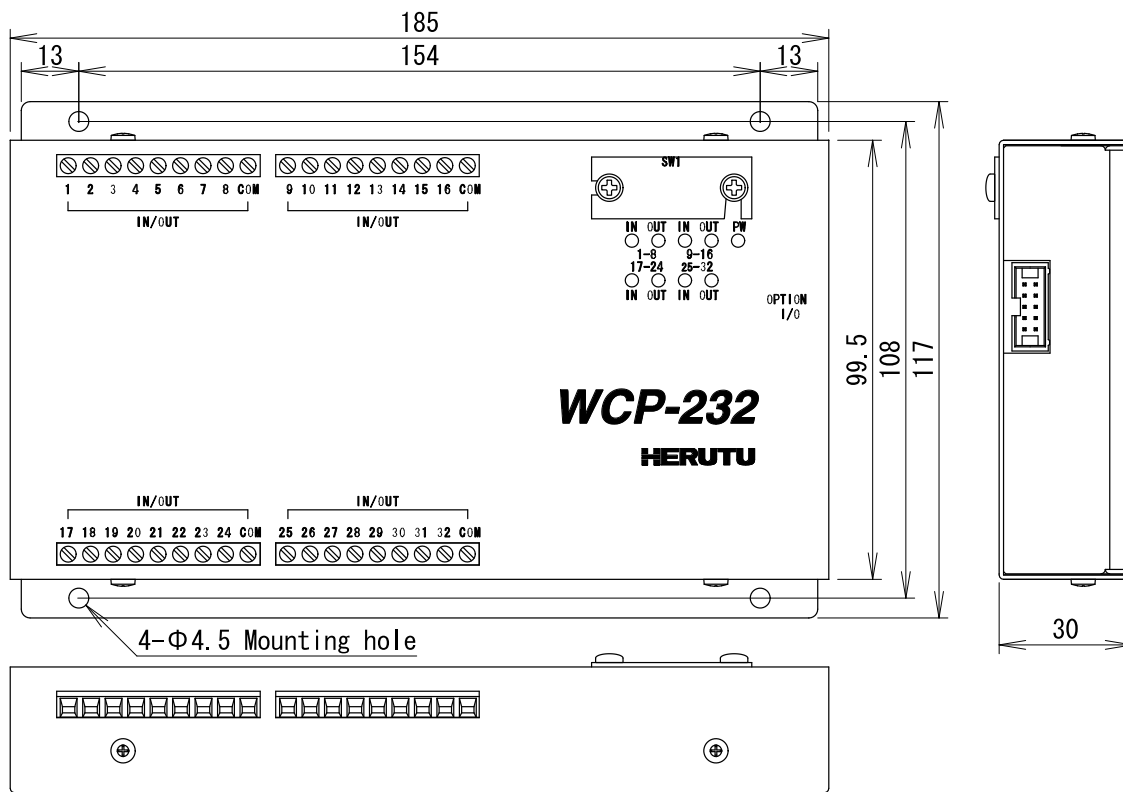
Name	Function
① PW Indicator (Red LED)	Lights when power is supplied to WCP-232. WCP-232 power is supplied from WCP-EXL via the communication connector.
② I/O Monitor Indicator (1-8)	The 32 points of input / output are divided into 4 blocks, and when any one of the blocks is in the ON state, the green LED lights up at the time of input and the red LED lights up at the time of output.
③ I/O Monitor Indicator (9-16)	
④ I/O Monitor Indicator(17-24)	
⑤ I/O Monitor Indicator(25-32)	
⑥ I/O Terminals (1-8,COM)	Screw-Type Terminal Block Tighten the screw with a flat-blade screwdriver. <ul style="list-style-type: none"> <li>■Input terminals: 1-8, 17-24</li> <li>■Output terminals: 9-16, 25-32</li> </ul>
⑦ I/O Terminals (9-16,COM)	
⑧ I/O Terminals(17-24,COM)	
⑨ I/O Terminals(25-32,COM)	
⑩ Connection Connector	RS-232C Interface, Also used for power supply. Connect to WCP-EXP with the attached cable.
⑪ Mounting Hole	Used when fixing WCP-EXL. There are 4 Φ4.5 holes.

## 4. Dimensions

### 4-1. WCP-EXL



### 4-2. WCP-232



## 5. Installation Method

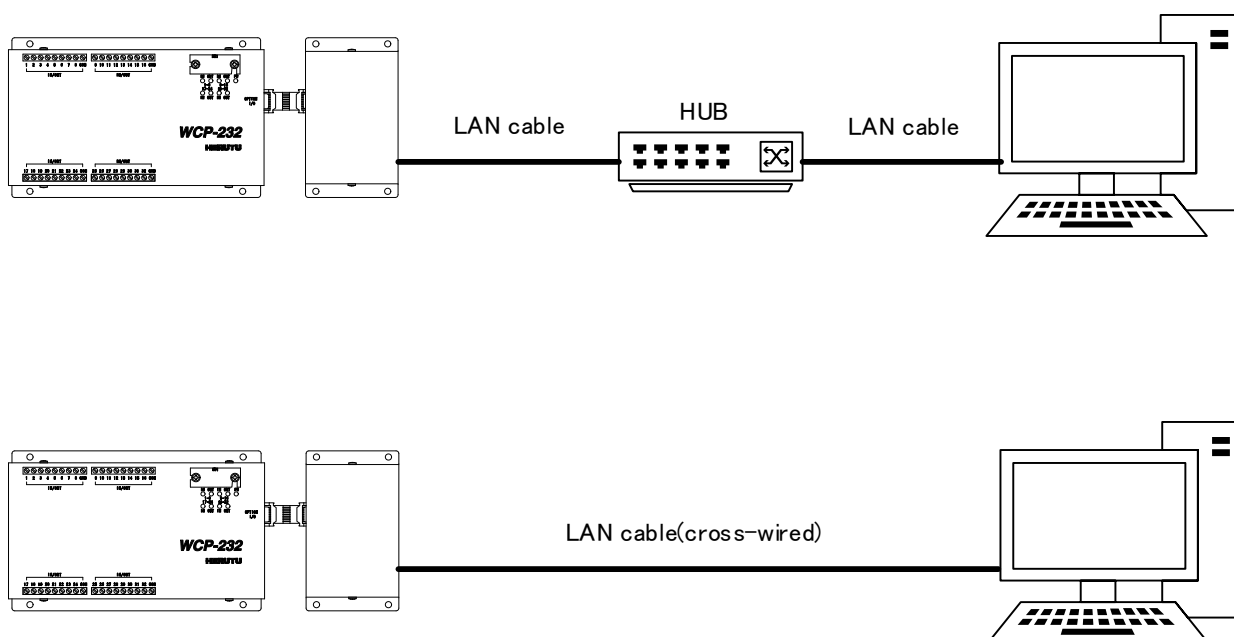
### 5-1. Machine Installation

For WCP-EXL and WCP-232, use the mounting holes on the main unit and fix them in a safe stable place. Also, WCP-EXL and WCP-232 are not dust-proof / drip-proof structures.

Do not install in the following places

- Places exposed to direct sunlight
- Places where the humidity is high

Connect the LAN port of WCP-EXL to the LAN port of HUB or PC with a LAN cable.

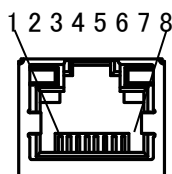


WCP-EXL does not have the AutoMDI / MDI-X function to determine the LAN port, so it is directly connected to the PC LAN port.

When connecting, use a cross-connected LAN cable.

## 5-2. LAN Port

The LAN port in WCP-EXL is RJ-45 type modular jack.

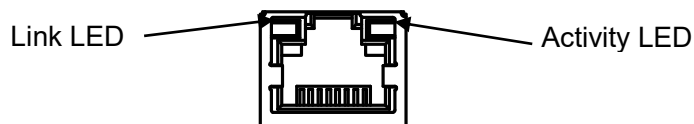


The pin specifications are as follows.

Pin No	Signal Name
1	TX+ [Transmitted Data(+)]
2	TX- [Transmitted Data(-)]
3	RX+ [Received Data(+)]
4	Not Used
5	Not Used
6	RX- [Received Data(-)]
7	Not Used
8	Not Used

Use a category 5 or higher standard for the LAN cable.

Also, the modular jack has a built-in LED lamp that allows you to check the communication status.



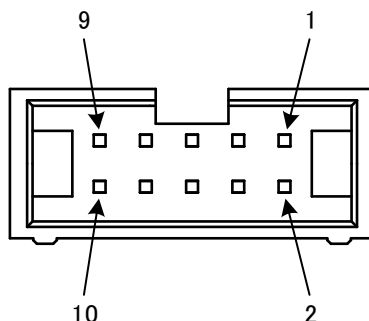
Link LED		Activity LED	
LED	Data	LED	Data
Off	Not Connected	Off	No Connection
Orange	10Mbps	Orange	Communicating in Half-Duplex (Lights only when communication occurs)
Green	100Mbps	Green	Communicating in Full-Duplex (Lights only when communication occurs)

### 5-3. Communication connector

A MIL type plug (10 poles) is used for the communication connector. Use the connection cable that comes with WCP-232 to connect the communication connectors of WCP-EXL and WCP-232.

For the cable, press the lock lever so that the connector does not come off, and insert the connector as far as it will go. Then, pull the cable lightly and make sure the connector does not come off.

Please Turn of the power when connecting the communication connector.

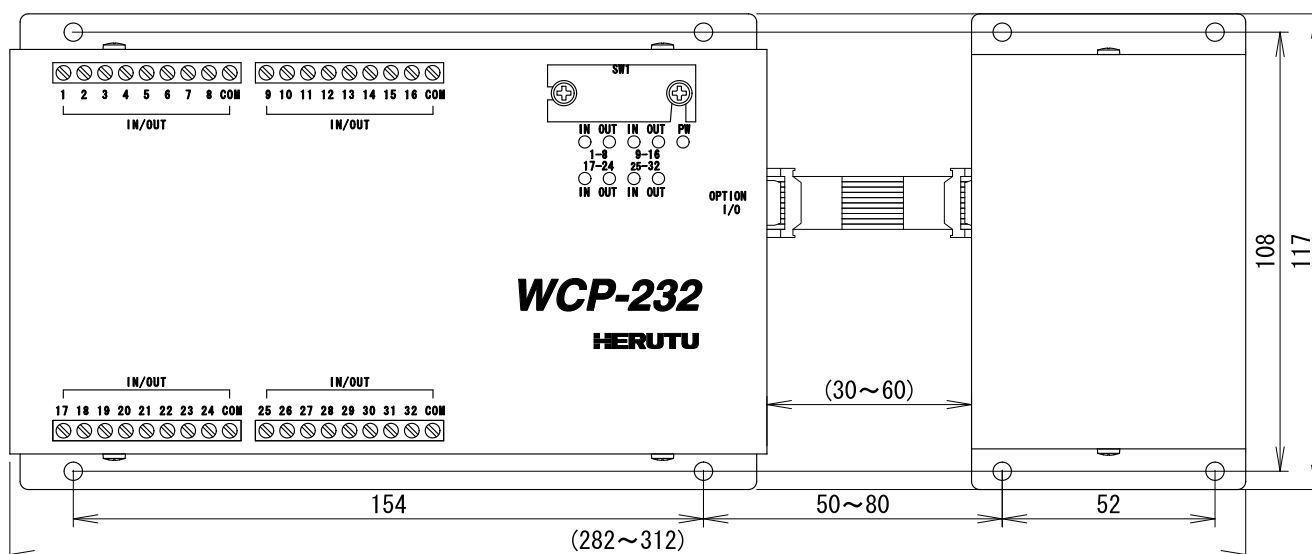


The pin specifications are as follows.

WCP-EXL Pin No	WCP-232 Pin No	Signal Name	Description
1	10	Vin	Power output(+5V)
2	9	TXD	Output Data
3	8	RXD	Input Data
4	7	DSR	In WCP-EXL, DSR[4] and DTR[6] is shorted
5	6	GND	Power/Signal ground
6	5	DTR	In WCP-EXL, DSR[4] and DTR[6] is shorted
7	4	CTS	Control Input
8	3	RTS	Control Output
9	2	GND	Power/Signal ground
10	1	Vin	Power output(+5V)

#### 5-4. Installation of WCP-EXL and WCP-232

The figure below shows the recommended mounting dimensions when connect WCP-EXL and WCP-232.



#### 5-5. Connection to I / O terminal block

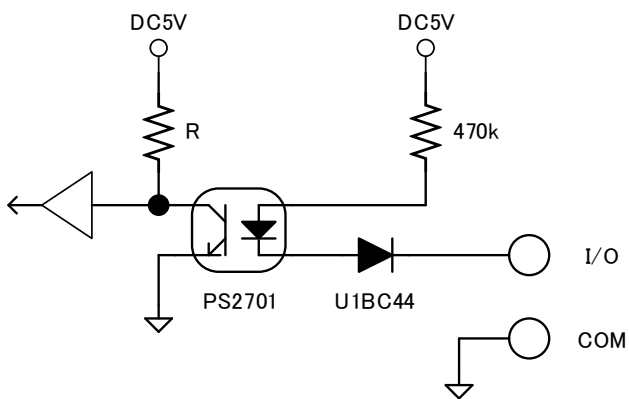
Follow the specifications below for the cable connected to the I / O terminal block.

- Connection wire range 0.14mm<sup>2</sup> to 1.5mm<sup>2</sup> (common to single wire / stranded wire)  
AWG26 to AWG16
- Peeling wire length 6.0 mm (pre-soldering of the tip of the wire is not possible)

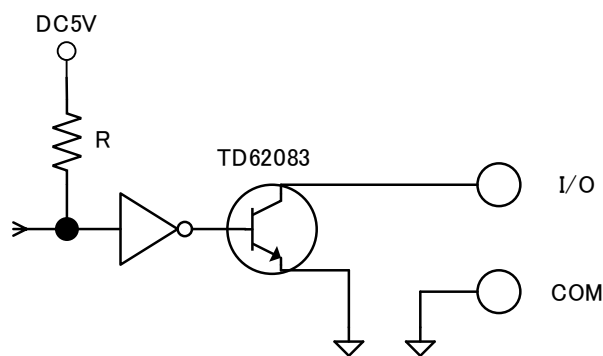
The tightening torque of the terminal block screw is 0.5Nm to 0.6Nm. Tighten with a flat-blade screwdriver. When checking the continuity with the head of the terminal block screw, make sure that the screw is tightened.

### 5-6. I / O terminal block circuit configuration

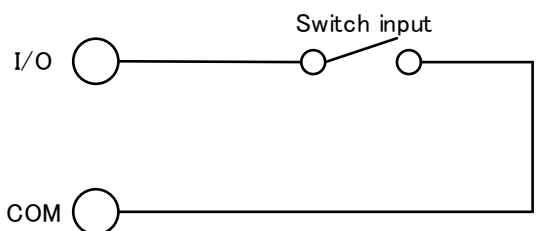
【Input circuit configuration】



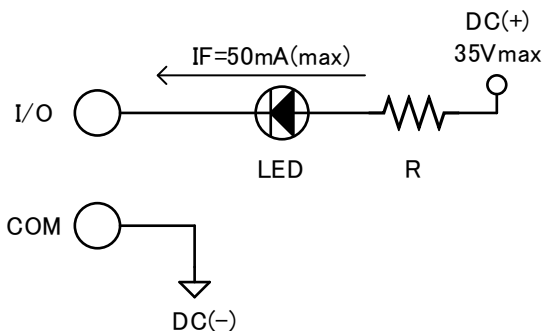
【Output circuit Configuration】



【Connection Example】



■ Contact input (ON when switch is short-circuited)

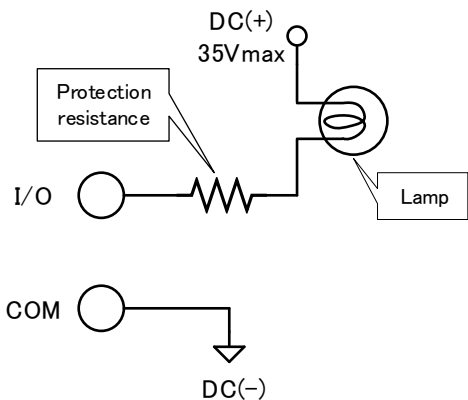


■ Contact Output

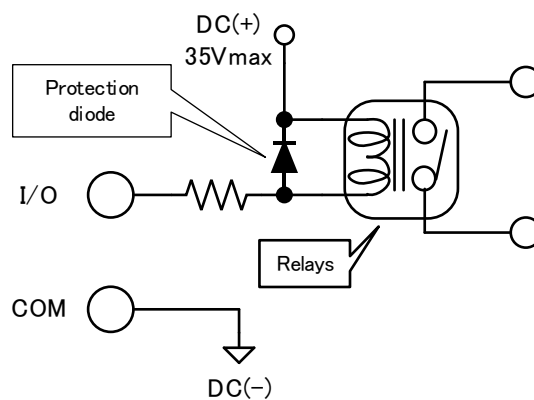
Use within the drive current per terminal. If the specified power supply voltage or drive current is exceeded, please connect a drive circuit such as a relay before use. Especially, when controlling an inductive load such as a lamp or relay, consider the inrush current and take appropriate measures on the load side.

【Example of countermeasures on the load side at the time of contact output】

【Lamp load】



【Relay(inductive) load】





## 6. Prepare to Start Communication

Before use of WCP-EXL, set each unit according to the use environment.

Set the IP address and other required items of WCP-EXL by using Lantronix's Windows-based software, "Device Installer".

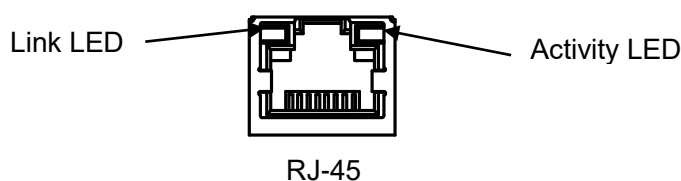
### 6-1. Installation of "Device Installer"

Download "Device Installer" from Lantronix's WEB site (<https://www.lantronix.com/products/deviceinstaller/>) to install it on your PC.

Connect the receiver to the HUB capable of communicating with the PC on which "Device Installer" is installed.

#### CAUTION

To connect the receiver to the PC with "Device Installer" installed using a LAN cable, be sure to use a cross LAN cable.



Check the left LED on the LAN connector (RJ-45) of WCP-EXL to see if the Link LED is ON.

When connected to 10Base-T, the Link LED lights up in orange. When connected to 100Base-TX, the Link LED lights up in green.

If the Link LED is not ON, WCP-EXL cannot communicate with the network. Confirm if the LAN cable and HUB are correctly connected.

### 6-2. Factory Default IP Address

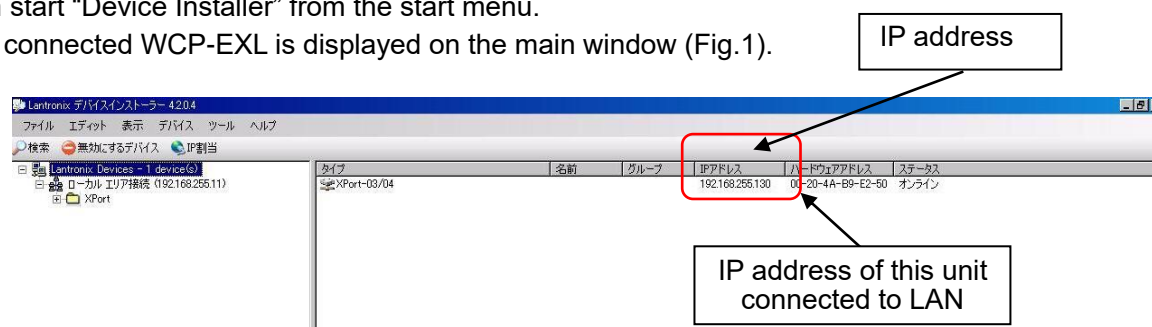
The factory default IP address of WCP-EXL is as follows:

IP Address	192.168.3.100
Sub Network	255.255.255.0
Default Gateway	0.0.0.0
Used Port(s) No	50001

### 6-3. IP Address Settings and Procedure

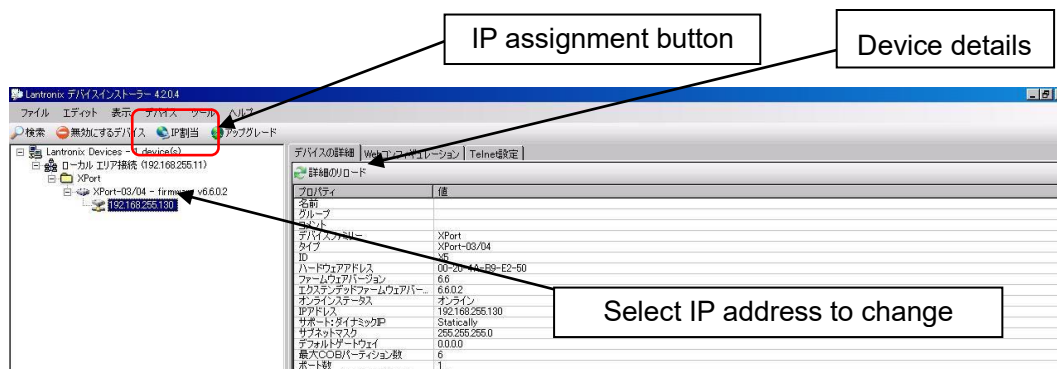
Check that the power of WCP-EXL is ON and that WCP-EXL is properly connected to the HUB or PC, and then start "Device Installer" from the start menu.

The connected WCP-EXL is displayed on the main window (Fig.1).



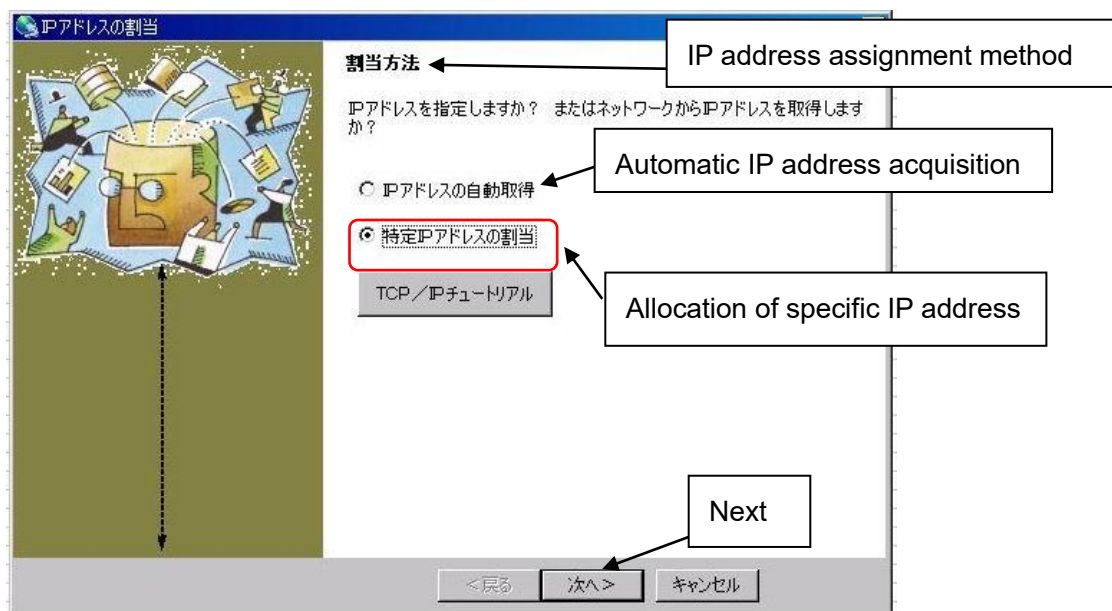
- Fig. 1 Screen to start Device Installer -

To change the IP address, select the address of the X port on the left of the screen.



- Fig. 2 Select IP address of Xport to change -

Click “IP assignment button”, and the screen is displayed as shown in Fig.3. Select to assign an IP address automatically or specify an IP address directly. This document explains about specifying an IP address. Check “Assign a specific IP address” and click the “Next” button.

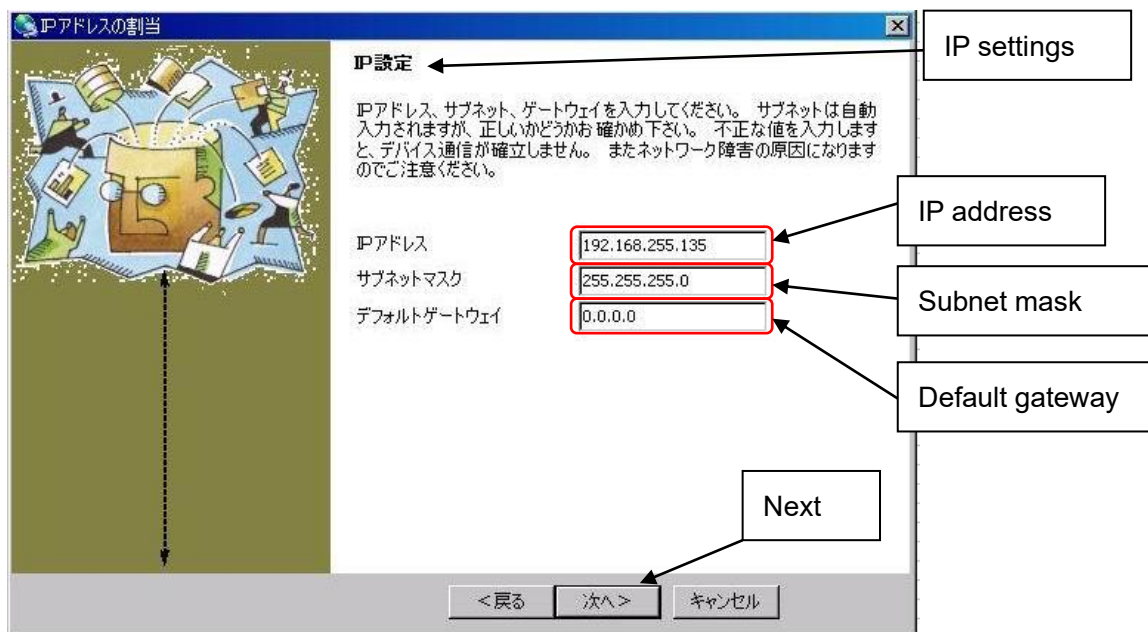


- Fig. 3 IP address assignment -

Enter the IP address, subnet mask and default gateway.

\*Before setting an IP address, obtain permission from the network administrator.

Click "Next" Button.



- Fig. 4 IP address input screen -

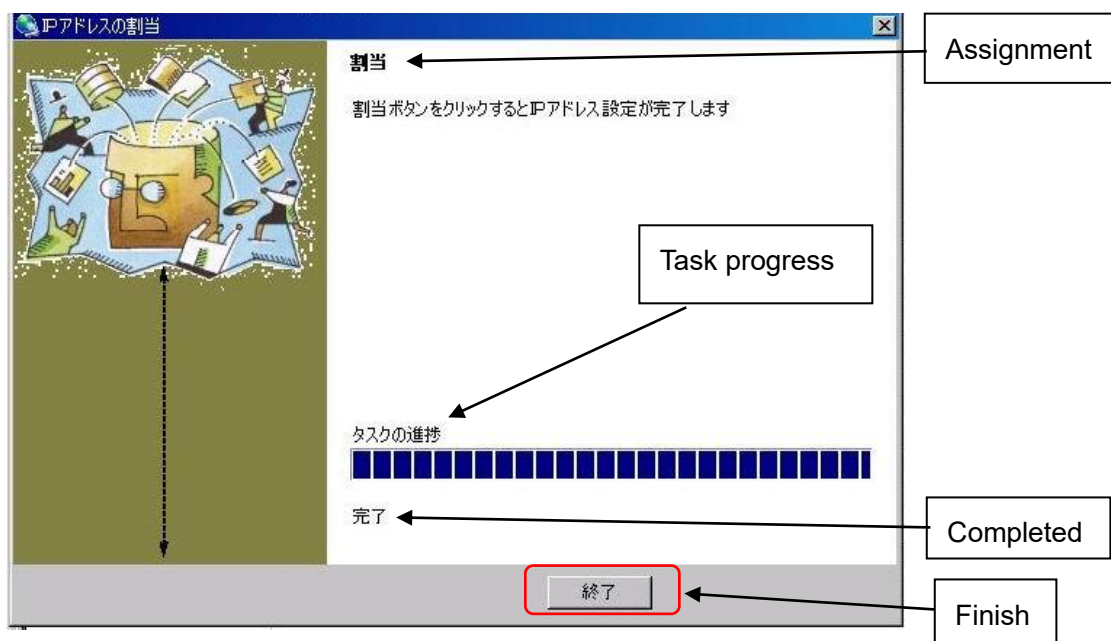
Click "Assignment" button.



- Fig. 5 Assignment input screen -

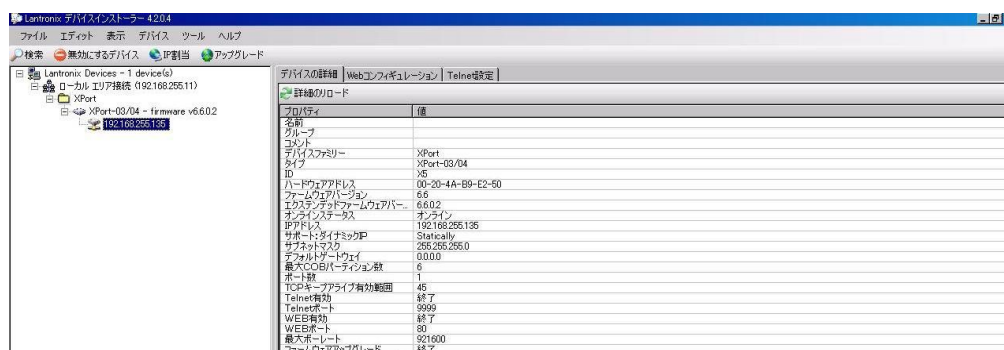
When the setting is completed, the “Exit” button becomes active.

It may take some time before the setting is completed. Please wait until the setting is completed.



- Fig. 6 Input end screen -

Click the “Exit” button, and the screen is displayed as shown in Fig.7. Confirm if the IP address has changed properly.



- Fig. 7 IP address display screen after change -

#### CAUTION

If the IP address set by the customer is already used on the network, the signals will run into each other. Set another IP address.

#### CAUTION

This product is intended to be used on a closed network that is not connected to the internet. Do not use this product in an open network environment that is connected to the internet.

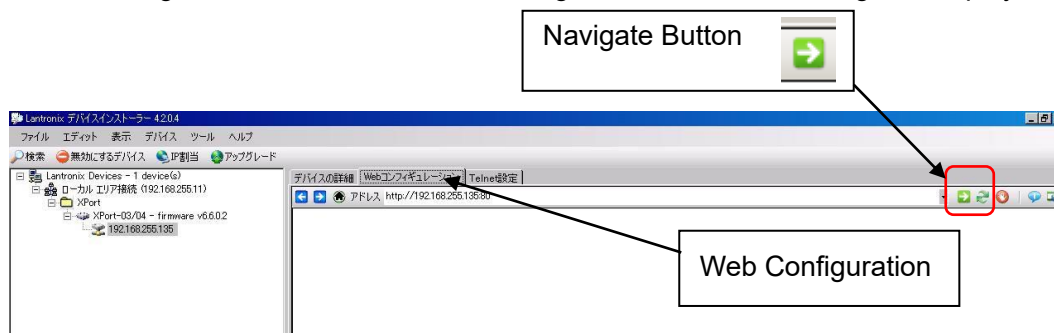
## ■Change Password

The WEB screen (Web Manager) inside X port requires user authentication by password. Change the default password in the following procedure.

### CAUTION

Leaving the default password can cause a security risk to the product. Be sure to change the default password.

Click the “WEB configuration” tab on the screen in Fig.7, and the screen in Fig.8 is displayed.



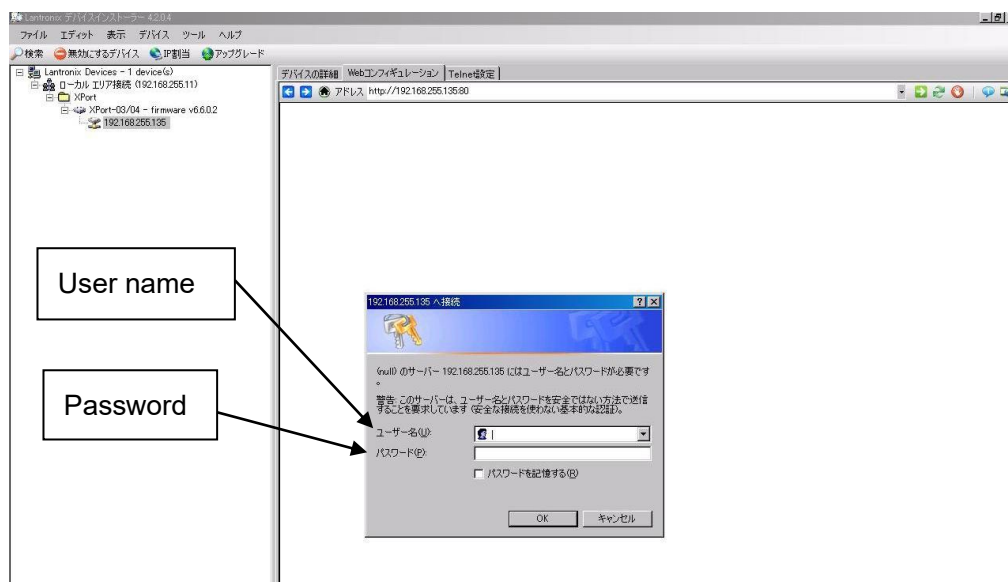
- Fig. 8 WEB configuration setting screen -

Click the “Navigate” button and the password entry screen in Fig.9 is displayed.

Please leave the user name blank.

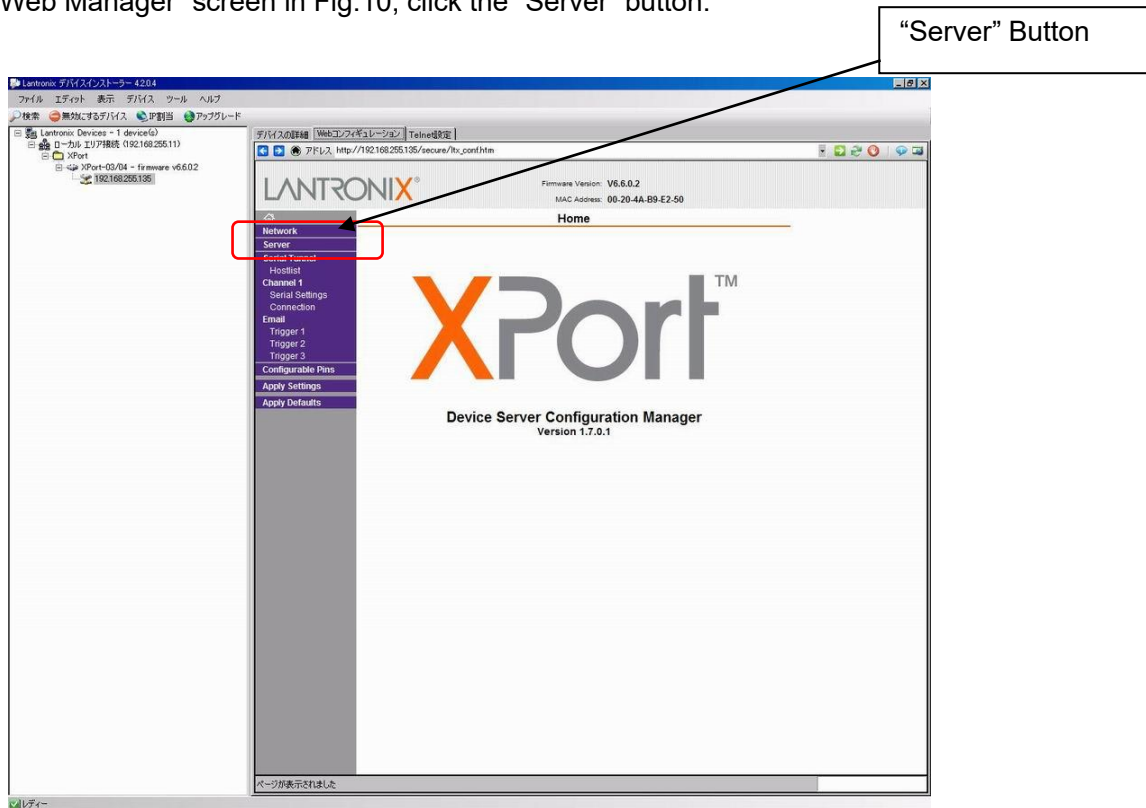
Enter the following password. When the entry is completed, click the “OK” button.

**Initial Password    wuS12f#&PHuTa1h3**



— Fig. 9 Password input screen —

On the “Web Manager” screen in Fig.10, click the “Server” button.



- Fig. 10 Web Manager initial screen -

Click the "Server" button, and the "Server Settings" screen in Fig.11 is displayed.

- ① Set the "Enhanced Password" radio button to "Enable".
- ② Enter a new password (up to 16 characters) in the "Telnet/Web Manager Password" field.
- ③ Enter the same password as ② in the "Retype Password" field.
- ④ Click "OK" button. If the passwords entered in ② and ③ match, "Done!" will be displayed to the right of the "OK" button. If the passwords entered in ② and ③ are different, an error message "Passwords do not match. Please retry again." is displayed. Retry ② and ③ again.
- ⑤ Click "Apply Settings" button.

When the process is completed, the password entry screen is displayed. Enter the set password and press the "OK" button. (Please leave the user name blank.) If login is successful, the settings are complete. Press the "x" button on the top right of the screen and the application exits.

The screenshot shows the 'Server Settings' screen in XPort. The left sidebar has a menu with 'Apply Settings' highlighted. The main content area is divided into 'Server Configuration' and 'Advanced' sections. In the 'Server Configuration' section, the 'Enhanced Password' radio button is selected as 'Enable'. Below it are two empty text input fields for 'Telnet/Web Manager Password' and 'Retype Password'. In the 'Advanced' section, there are several settings: 'ARP Cache Timeout (secs): 600', 'TCP Keepalive (secs): 45', 'Monitor Mode @ Bootup: Enable', and 'CPU Performance Mode: Regular'. At the bottom, there are 'HTTP Server Port: 80', 'Config Server Port: 30718', 'MTU Size: 1400', and 'TCP Re-transmission timeout (ms): 500'. An 'OK' button is located at the bottom right. Numbered callouts 1 through 5 point to the 'Enhanced Password' radio button, the password fields, the 'Apply Settings' button, and the 'OK' button respectively.

- Fig. 11 Server settings initial screen -

#### CAUTION

When reconfirming the changes made to the settings, the changes may not be reflected in the display. In that case, reboot the software (Device Installer) and check the changes again.

#### ■About settings various parameters

Various parameters can be set on the WEB screen (Web Manager) inside X Port. However, do not change the settings of the parameters. The default values are set to work properly.

## 7. How to Use

To use "WCP-232-EXL" with our production process support software "POKAYOKE plus" and "WCL plus", it is necessary to register the I / O unit information from the menu of each software.

For details on how to register and use the I / O unit, please refer to "Production Process Support Software for Pokayoke Tools [POKAYOKE plus] Instruction Manual" and "Production Process Support Software for WCL Series [WCL plus] Instruction Manual".

When connecting to "POKAYOKE plus" and "WCL plus", WCP-232-EXL operates with the following settings (fixed settings).

### ■ I/O Terminal Block Setting

Input Terminals : 1-8, 17-24

Output Terminals : 9-16, 25-32

### ■ Input Terminals

Please input the signal at least 500mSEC.

It is A contact input.



## 8. After Service and Warranty

If something is wrong. If you should find anything wrong with the machine when using it under normal conditions, check the warranty and repair regulations and contact the outlet store through which you purchased the product or our Sales Office. The latest warranty and repair regulations can be found on our website.

The user is prohibited by law from disassembling or making modification to the unit or otherwise may be subject to punishment.

[Warranty Regulation]

This regulation (hereinafter referred to as the "Regulation") is for post-shipment warranty provided by HERUTU ELECTRONICS CORPORATION (hereinafter referred to as the "Company") so that you can use the Company's product you have purchased with confidence. The Regulation does not apply to special order products (custom products). In addition, purchased products shall be subject to the relevant manufacturer's warranty regulations, and the Regulation shall not apply.

Please note that in the event that the product you purchased comes with an instruction manual that describes the Company's old repair regulation, the latest Regulation will still apply.

### 1. Warranty period

Unless otherwise specified, the warranty period shall be "up to thirteen months from the date of shipment of the product by the Company". During the warranty period, the Company will replace the product with a new one or repair it free of charge in accordance with the provisions of the Regulation.

In addition, if a failure occurs during the warranty period due to the Company's responsibility and the product with the failure (hereinafter referred to as the "Product") is replaced with a new one or repaired free of charge, the warranty period of the Product will be "thirteen months from the date of initial shipment of the Product, or six months from the date of shipment of the Product that has been replaced or repaired, whichever comes later".

The warranty period for paid repairs shall be in accordance with the provisions of the Company's repair regulation.

### 2. Warranty scope

If a failure occurs during the warranty period due to the Company's responsibility, the Company will replace the product with a new one or repair it free of charge.

Even within the warranty period, the warranty does not apply in the following cases:

- A) In the event of failure or damage caused by improper handling by the customer, such as dropping or impact during transportation or movement by the customer
- B) In case of failure due to disassembly or modification of the main unit by the customer
- C) In case of natural disasters such as fires, earthquakes, floods, and in case of failure or damage due to abnormal voltage
- D) In case of failure caused by failure of equipment other than the Company's designated equipment connected to the Product
- E) In case of failure of the Product's accessories (AC adapter, antenna, connection cable, etc.)

F) If damage is caused by the failure of consumables or limited-life parts included in the Product:

1. Consumables: Batteries (rechargeable, batteries, dry batteries, button batteries, etc.), recording media (SD cards, etc.)
2. Limited-life parts: Various switches (limit switches, push button switches, etc.) and various sensors
3. Other items that are worn out or have a service life due to use

If consumables or limited-life parts fail, we will replace or repair the parts for a fee.

G) In case of failure caused by handling contrary to the usage and precautions described in the instruction manual of the Product

H) If repaired, adjusted, or improved by elsewhere other than the Company

I) If the Company is unable to reproduce the failure

### 3. About repair of the Product

Please note that repairing the Product requires equipment such as measuring instruments and tools, so the Company will handle it as a pick-up repair service at the Company.

### 4. About the shipping cost for replacement or repair of the Product

Shipping charges for sending the Product to the Company or a distributor, as well as shipping charges for sending the Product that has been replaced or repaired by the Company or the distributor to the customer, will be borne by the Company or the distributor.

### 5. Disclaimer

The Company is not responsible for any direct or indirect damages or monetary loss caused by failure of the Product or its use.

### 6. Additional notes

Please note in advance that the information of the Product described on the Company's website and in the catalogs, instruction manuals, technical materials, and other materials provided by the Company are subject to change without notice to customers.

### [Repair Regulation]

This regulation (hereinafter referred to as the "Regulation") shall be applied to paid repair service (hereinafter referred to as the "Service") provided by HERUTU ELECTRONICS CORPORATION (hereinafter referred to as the "Company"). The Regulation does not apply to special order products (custom products). In addition, purchased products shall be subject to relevant manufacturer's repair regulations, and the Regulation shall not apply.

Please note that in the event that the product you purchased comes with an instruction manual that describes the Company's old repair regulation, the latest Regulation will still apply.

#### 1. Subject of the Regulation

The Service is provided for the Company's products that are "beyond the scope of the warranty specified in the warranty regulation" and "from the sales start date to the end date of the repair period (seven years from the production end date)". However, please note that the end date of the repair implementation period may

be earlier depending on the availability and procurement status of repair parts.

## 2. Establishment of contract

The contract shall be established when the customer approves the quotation presented by the Company and issues an order form before the end of the repair implementation period.

## 3. Purpose of the Service

The Company will provide the Service for the purpose of repairing the function and performance of the Company's product used by the customer if it fails beyond the scope of the warranty specified in the warranty regulation. Please note that the Service requires equipment such as measuring instruments and tools, so the Company will handle it as a pick-up repair service at the Company.

## 4. Usage fee for the Service

The usage fee for the Service shall be the total of the following fees:

### A) Repair service fee

The repair service fee is the total amount of technical fees, parts costs, other expenses incurred, and applicable taxes associated with repairing the Company's product (hereinafter referred to as the "Product for repair") that the customer wishes to repair.

### B) Shipping fee (including the cost of packaging boxes)

The Company kindly asks that customers bear the shipping costs for sending the Product for repair to the Company and for returning it from the Company. However, in the event that the Product for repair is sent by payment on delivery by the customer, the shipping cost will be included in the Service charge.

## 5. Warranty period and scope of the Product for repair

The warranty period for the Product for repair is "up to six months from the date of repair completion".

However, please note that failures other than the repaired parts (repaired places or replaced parts) are not covered by the warranty of the Product for repair. In addition, if a failure occurs due to the Company's responsibility within the warranty period, the Company will again repair the product free of charge.

## 6. Handling of repair parts

A) In order to provide the Service stably for a long time and to promote environmental protection, etc., the Company may use recycled parts or alternative parts at the time of repair at its discretion.

B) The Company may, at its own discretion, collect the removed parts for the purpose of recycling or analysis at the time of parts replacement through the regulation of the Service. Please note that the collected parts are the property of the Company and will be recycled, used or discarded at its discretion.

## 7. Estimate for the Service

The estimate for the Service is basically free of charge. However, if the Company is unable to reproduce the failure, it will not be able to carry out repairs and will not provide an estimate. If a technical investigation is required to reproduce the failure, the Company will estimate the cost of reproducing the failure.

## 8. Return of unrepaired product

If the Company does not estimate the cost of the Service due to reasons such as being unable to reproduce the failure, it will return the Product for repair to the customer.

In addition, if the customer does not place an order within three months from the date of creation of the quotation, or if the customer does not accept the quotation and the customer expresses an intention not to carry out the repair, the Company will assume that the customer has canceled the request for the Service, and the Company will return the Product for repair to the customer without carrying out the repair.

In addition, if a shipping fee is incurred for returning the product, it will be borne by the customer.

## 9. Handling of personal information

The Company will properly handle personal information such as names and addresses being provided in accordance with the privacy policy posted on the Company's website.

## 10. Compensation for damages

- A) The responsibility of the Company for providing the Service shall be limited to the matters and contents specified in the repair regulation, and shall not include any damages incurred by the customer due to special circumstances (including loss of profits of the customer and damages based on claims for compensation made by third parties against the customer) and damages caused by the customer being unable to use the product due to a failure or defect of the Product for repair. However, this does not apply if the damage was caused by the Company's willful misconduct or gross negligence.
- B) Even if the Company is liable to the customer for damages in connection with the regulation of the Service, the Company's liability shall not exceed the amount equivalent to the value of the Product for repair, except in cases of willful misconduct or gross negligence on the part of the Company. The value of the Product for repair shall be calculated based on the residual value after depreciation or the price of products with equivalent performance sold in the market at the time of damage.

## 11. Additional notes

- A) The Company cannot restore stickers, LCD protective sheets, and coloring applied to the outer casing parts that you have attached yourself. In addition, if advertisement stickers were affixed at the time of sale, they cannot be newly prepared as repair parts when replacing the outer casing parts. After replacing the outer casing parts, the advertisement stickers will be returned without being affixed.
- B) Please note in advance that the information of the Product on the Company's website and in the catalogs, instruction manuals, technical materials, and other materials provided by the Company are subject to change without notice to customers.









**HERUTU ELECTRONICS CORPORATION**

422-1 Higashimikata-cho, Kita-ku, Hamamatsu, Shizuoka, 433-8104 Japan

(Sales dept) TEL.+81-53-438-3555 FAX. +81-53-438-3411

Website URL <https://www.herutu.co.jp/en/> E-mail [info@herutu.co.jp](mailto:info@herutu.co.jp)