

YASNAC XRC OPTIONS INSTRUCTIONS

FOR JARCR-XOI01B BOARD

Upon receipt of the product and prior to initial operation, read these instructions thoroughly, and retain for future reference.

MOTOMAN INSTRUCTIONS

- MOTOMAN SETUP MANUAL
- MOTOMAN-□□□ INSTRUCTIONS
- YASNAC XRC INSTRUCTIONS
- YASNAC XRC OPERATOR'S MANUAL
- YASNAC XRC OPERATOR'S MANUAL for BEGINNERS

The YASNAC XRC operator's manuals above correspond to specific usage.
Be sure to use the appropriate manual.

Part Number: 176829-1CD
Revision: 0

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 **MANDATORY**

- This manual explains the JARCR-XOI01B board of the YASNAC XRC system and general operations. Read this manual carefully and be sure to understand its contents before handling the YASNAC XRC.
- General items related to safety are listed in Section 1: Safety of the Setup Manual. To ensure correct and safe operation, carefully read the Setup Manual before reading this manual.

 **CAUTION**

- Some drawings in this manual are shown with the protective covers or shields removed for clarity. Be sure all covers and shields are replaced before operating this product.
- The drawings and photos in this manual are representative examples and differences may exist between them and the delivered product.
- YASKAWA may modify this model without notice when necessary due to product improvements, modifications, or changes in specifications. If such modification is made, the manual number will also be revised.
- If your copy of the manual is damaged or lost, contact a YASKAWA representative to order a new copy. The representatives are listed on the back cover. Be sure to tell the representative the manual number listed on the front cover.
- YASKAWA is not responsible for incidents arising from unauthorized modification of its products. Unauthorized modification voids your product's warranty.

We suggest that you obtain and review a copy of the ANSI/RIA National Safety Standard for Industrial Robots and Robot Systems (ANSI/RIA R15.06-2012). You can obtain this document from the Robotic Industries Association (RIA) at the following address:

Robotic Industries Association
900 Victors Way
P.O. Box 3724
Ann Arbor, Michigan 48106
TEL: (734) 994-6088
FAX: (734) 994-3338
www.roboticsonline.com

Ultimately, well-trained personnel are the best safeguard against accidents and damage that can result from improper operation of the equipment. The customer is responsible for providing adequately trained personnel to operate, program, and maintain the equipment. **NEVER ALLOW UNTRAINED PERSONNEL TO OPERATE, PROGRAM, OR REPAIR THE EQUIPMENT!**

We recommend approved Yaskawa training courses for all personnel involved with the operation, programming, or repair of the equipment.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

NOTES FOR SAFE OPERATION

Read this manual carefully before installation, operation, maintenance, or inspection of the YASNAC XRC.

In this manual, the Notes for Safe Operation are classified as “WARNING”, “CAUTION”, “MANDATORY”, or “PROHIBITED”.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to personnel.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury to personnel and damage to equipment. It may also be used to alert against unsafe practices.



MANDATORY

Always be sure to follow explicitly the items listed under this heading.



PROHIBITED

Must never be performed.

Even items described as “CAUTION” may result in a serious accident in some situations. At any rate, be sure to follow these important items.



NOTE To ensure safe and efficient operation at all times, be sure to follow all instructions, even if not designated as “CAUTION” and “WARNING”.



WARNING

- **Before operating the manipulator, check that servo power is turned off when the emergency stop buttons on the playback panel or programming pendant are pressed.**

When the servo power is turned off, the SERVO ON READY lamp on the playback panel and the SERVO ON LED on the programming pendant are turned off.

Injury or damage to machinery may result if the emergency stop circuit cannot stop the manipulator during an emergency. The manipulator should not be used if the emergency stop buttons do not function.



Emergency Stop Button

- **Once the emergency stop button is released, clear the cell of all items which could interfere with the operation of the manipulator. Then turn the servo power ON.**

Injury may result from unintentional or unexpected manipulator motion.



Release of Emergency Stop

- **Always set the Teach Lock before entering the robot work envelope to teach a job.**

Operator injury can occur if the Teach Lock is not set and the manipulator is started from the playback panel.

- **Observe the following precautions when performing teaching operations within the working envelope of the manipulator :**
 - View the manipulator from the front whenever possible.
 - Always follow the predetermined operating procedure.
 - Ensure that you have a safe place to retreat in case of emergency.

Improper or unintended manipulator operation may result in injury.

- **Confirm that no persons are present in the manipulator's work envelope and that you are in a safe location before:**
 - Turning on the YASNAC XRC power
 - Moving the manipulator with the programming pendant
 - Running check operations
 - Performing automatic operations

Injury may result if anyone enters the working envelope of the manipulator during operation. Always press an emergency stop button immediately if there are problems. The emergency stop button is located on the right side of both the YASNAC XRC playback panel and programming pendant.



CAUTION

- **Perform the following inspection procedures prior to conducting manipulator teaching. If problems are found, repair them immediately, and be sure that all other necessary processing has been performed.**

- Check for problems in manipulator movement.
- Check for damage to insulation and sheathing of external wires.

- **Always return the programming pendant to the hook on the XRC cabinet after use.**

The programming pendant can be damaged if it is left in the manipulator's work area, on the floor, or near fixtures.

- Read and understand the Explanation of the Alarm Display in the setup manual before operating the manipulator.



PROHIBITED

- Do not use or keep the board in the following environmental conditions.
 - Where exposed to direct sunshine
 - Where vibration or impact occurs
 - Where high humidity exists
 - Where a strong magnetic field exists
 - Where much dust exists
 - Where a sudden change in the temperature occurs
 - Where corrosive gases occur
 - Where condensation occurs

Improper usage of the board may damage the board.

Definition of Terms Used Often in This Manual

The MOTOMAN manipulator is the YASKAWA industrial robot product.


The manipulator usually consists of the controller, the playback panel, the programming pendant, and supply cables.

The MOTOMAN manipulator is the YASKAWA industrial robot product.

In this manual, the equipment is designated as follows.

Equipment	Manual Designation
YASNAC XRC Controller	XRC
YASNAC XRC Playback Panel	Playback Panel
YASNAC XRC Programming Pendant	Programming Pendant

Descriptions of the programming pendant and playback panel keys, buttons, and displays are shown as follows:

Equipment		Manual Designation
Programming Pendant	Character Keys	The keys which have characters printed on them are denoted with []. ex. [ENTER]
	Symbol Keys	The keys which have a symbol printed on them are not denoted with [] but depicted with a small picture. ex. page key  The cursor key is an exception, and a picture is not shown.
	Axis Keys Number Keys	“Axis Keys” and “Number Keys” are generic names for the keys for axis operation and number input.
	Keys pressed simultaneously	When two keys are to be pressed simultaneously, the keys are shown with a “+” sign between them, ex. [SHIFT]+[COORD]
	Displays	The menu displayed in the programming pendant is denoted with { }. ex. {JOB}
Playback Panel	Buttons	Playback panel buttons are enclosed in brackets. ex. [TEACH] on the playback panel

Description of the Operation Procedure

In the explanation of the operation procedure, the expression “Select ••• ” means that the cursor is moved to the object item and the SELECT key is pressed.

Customer Support Information

If you need assistance with any aspect of your JARCR-XOI01B Board system, please contact YASKAWA Customer Support at the following 24-hour telephone number:

(937) 847-3200

For **routine** technical inquiries, you can also contact YASKAWA Customer Support at the following e-mail address:

techsupport@motoman.com

When using e-mail to contact YASKAWA Customer Support, please provide a detailed description of your issue, along with complete contact information. Please allow approximately 24 to 36 hours for a response to your inquiry..



Please use e-mail for routine inquiries only. If you have an urgent or emergency need for service, replacement parts, or information, you must contact YASKAWA Customer Support at the telephone number shown above.

Please have the following information ready before you call Customer Support:

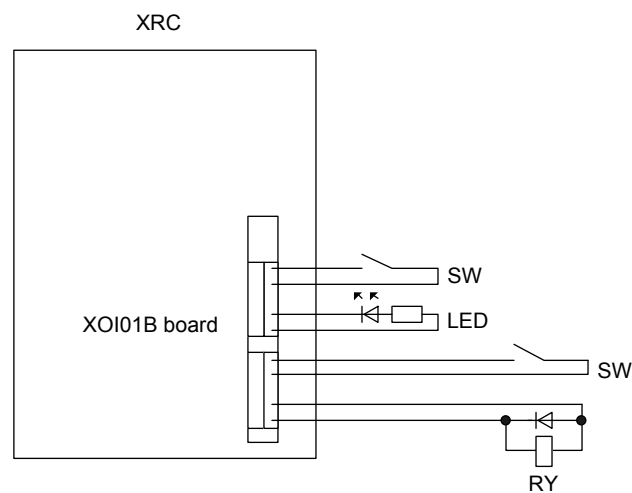
- System JARCR-XOI01B Board
- Robots _____
- Primary Application _____
- Controller DX200 and FS100
- Software Version Access this information on the Programming Pendant's LCD display screen by selecting {MAIN MENU} - {SYSTEM INFO} - {VERSION}
- Robot Serial Number Located on the robot data plate
- Robot Sales Order Number Located on the DX200 and FS100 controller data plate

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1 Outline

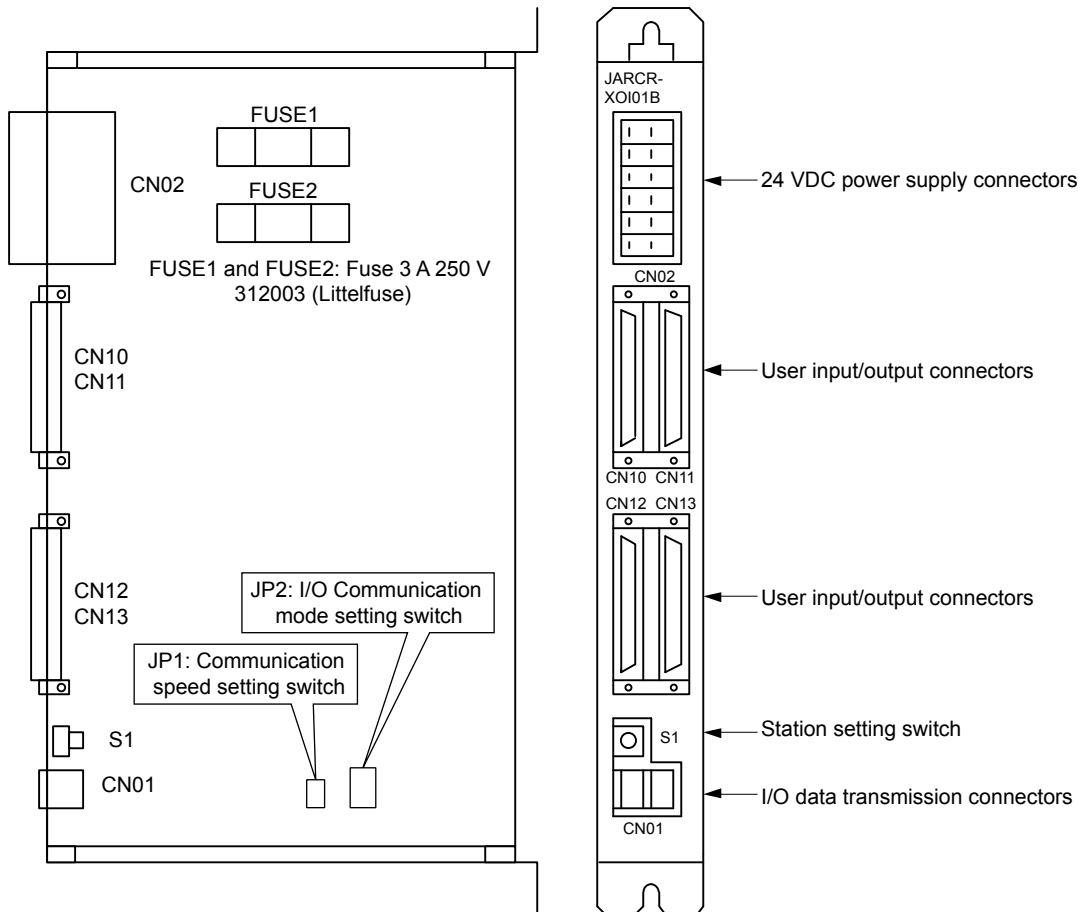
This instruction manual describes the I/O expansion board, the JARCR-XOI01B (hereinafter called the XOI01B board). The XRC includes the JANCD-XIO01 board (hereinafter called the XIO01 board) and the JANCD-XIO02 board (hereinafter called the XIO02 board) for I/O board, inside the JZNC-XIU01 unit as standard equipment. The XOI01B board is designed so that the circuit configuration and the pin arrangement of its I/O are the same as those for the XIO02 board. The XOI01B board can be used to expand the number of I/O points when more XRC I/O points are needed.

■ System Configuration Example



2 Hardware Specifications

2.1 Board External View

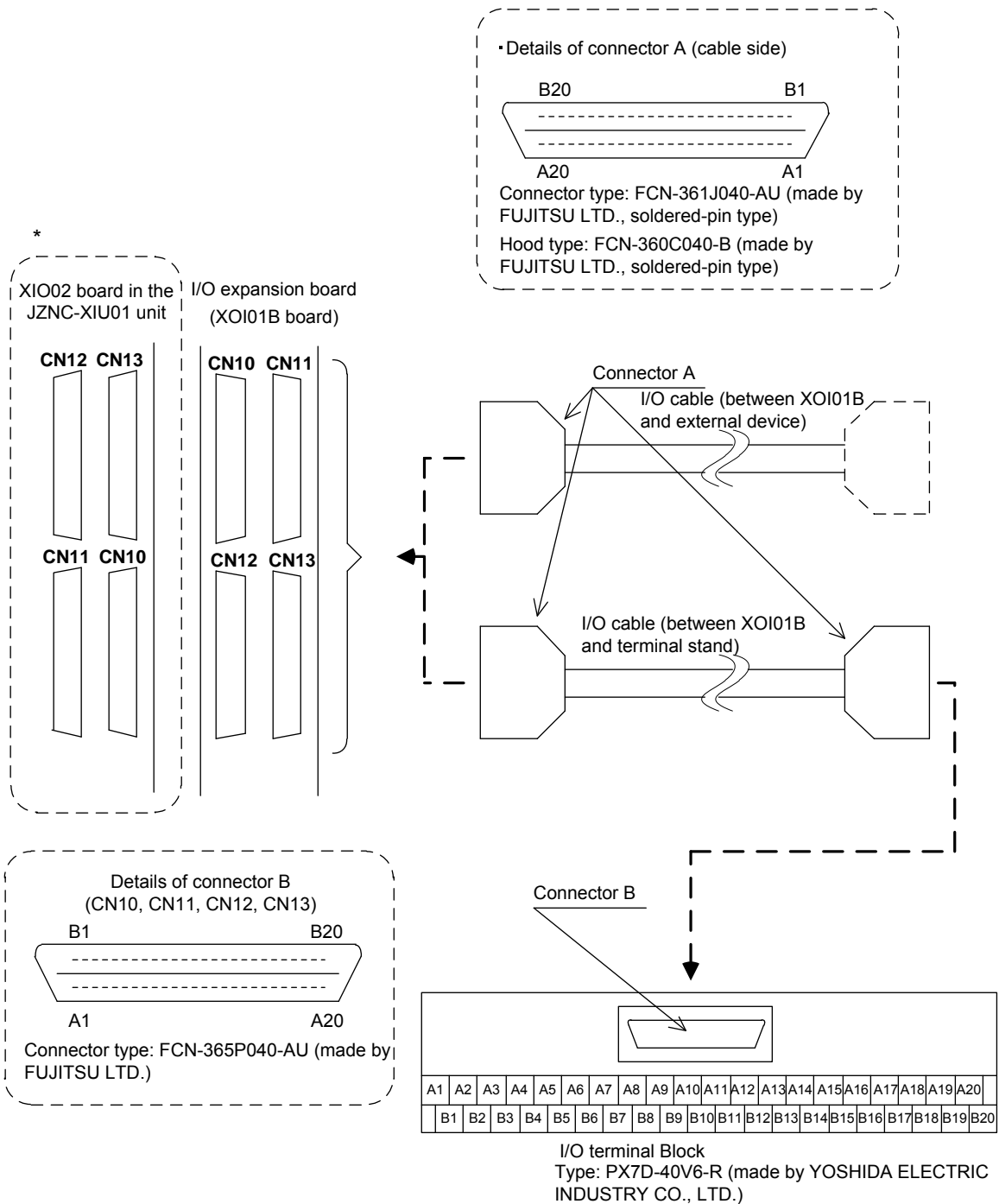


2.2 Board Specifications

Items	Specifications
Board mounting position	Optional board mounting space in the XRC
Number of I/O points	Input: 40 points Output: 40 points (transistor output 24 points, relay output 16 points)

2.3 General-purpose I/O Connectors

The general-purpose I/O connectors are same as those used for the XIO02 board. The circuit configuration and the pin arrangement are designed so that each of the connectors CN10 to CN13 of the XOI01B board corresponds to those of the XIO02 board.



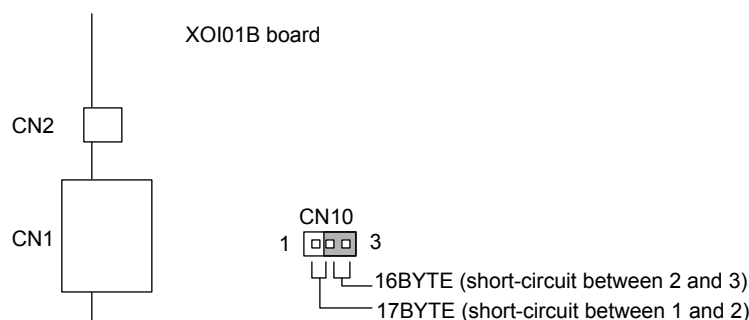
*The arrangement of CN10, CN11, CN12 and CN13 is different for the XOI01B board and the XIO02 board in the JZNC-XIU01 unit.

3 Setting the Functions

3.1 Function Setting Switches




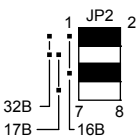

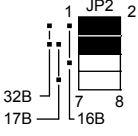
The section explains the switches that set the functions of the XOI01B board. Make the proper settings following the instructions. For details of the settings, refer to page 3-2.

- S1:** Sets the stations for the XOI01B board on the XRC.
The setting range for a station is 1 (ST#01) to E (ST#14).
Do not set the station to 0 (ST#00) or F (ST#15).
- JP1:** Sets the communication speed.
This switch sets the communication speed to 4 Mbps or 10 Mbps.
Be sure to set this switch to 4 Mbps.
Do not set it to 10 Mbps.
If the number of I/O points on the XOI01B board does not appear on the Programming Pendant, check if the communication cable or power cable is connected correctly, referring to the I/O module setting in chapter " 5 I/O Signal Allocation ". When the cables are correctly connected, the JP1 may be set to 10 Mbps.
Change the setting to 4 Mbps.
- JP2:** Sets the communication mode.
This switch sets the communication mode to 16 bytes, 17 bytes, or 32 bytes.
Default setting is 17 bytes.
Be sure to set this switch to 16 bytes.
Do not set it to 32 bytes.
Be sure to set this switch to 16 bytes. Do not set it to 17 bytes and 32 bytes.
If the number of I/O points on the XOI01B board does not appear on the Programming Pendant, check if the communication cable or power cable is connected correctly, referring to the I/O module setting in chapter " 5 I/O Signal Allocation ". When the cables are correctly connected, the JP2 may be set to 17 bytes or 32 bytes.
Change the setting to 16 bytes.
Or CN10 on JANCD-XIO01 board in the JZNC-XIU01 unit may be set to 17 bytes.
Change the setting of JARCR-XOI01B board to 17 bytes.
(When the I/O board for MRC or the exclusive board for 16 byte mode is used with JARCR-XEB01 board, be sure to change the setting to 16 byte mode.)



3.2 Setting Method

3.2 Setting Method

Switches	Setting Method																
S1 Station setting	 <p>Sets the stations. The relation between the switch setting and the station is shown below. Turn the arrow to the number corresponding to the desired station. (Use a flat tip screwdriver.)</p> <table> <tr> <td>0: Cannot be set</td> <td>8: ST#08</td> </tr> <tr> <td>1: ST#01</td> <td>9: ST#09</td> </tr> <tr> <td>2: ST#02</td> <td>A: ST#10</td> </tr> <tr> <td>3: ST#03 (Default setting)</td> <td>B: ST#11</td> </tr> <tr> <td>4: ST#04</td> <td>C: ST#12</td> </tr> <tr> <td>5: ST#05</td> <td>D: ST#13</td> </tr> <tr> <td>6: ST#06</td> <td>E: ST#14</td> </tr> <tr> <td>7: ST#07</td> <td>F: Can not be set</td> </tr> </table> <p>The number after ST# is the station number displayed on the programming pendent of the DX100 when setting I/O modules. The default setting is ST#03.</p>	0: Cannot be set	8: ST#08	1: ST#01	9: ST#09	2: ST#02	A: ST#10	3: ST#03 (Default setting)	B: ST#11	4: ST#04	C: ST#12	5: ST#05	D: ST#13	6: ST#06	E: ST#14	7: ST#07	F: Can not be set
0: Cannot be set	8: ST#08																
1: ST#01	9: ST#09																
2: ST#02	A: ST#10																
3: ST#03 (Default setting)	B: ST#11																
4: ST#04	C: ST#12																
5: ST#05	D: ST#13																
6: ST#06	E: ST#14																
7: ST#07	F: Can not be set																
JP1 Setting of the communication speed	 <p>Short circuit between 1 and 2: 10 Mbps *Setting unavailable</p>  <p>Short circuit between 2 and 3: 4 Mbps (Default setting) *Setting indispensable</p>																
JP2 Setting of the I/O communication mode	 <p>Short circuit between 1 and 2, 5 and 6: 16 byte mode *General setting</p>  <p>Short circuit between 3 and 4, 7 and 8: 17 byte mode</p>  <p>Short circuit between 1 and 2, 3 and 4: 32 byte mode *Setting unavailable</p>																



Do not set S1 to 0 or F. Do not set more than one board to one ST#. Improper settings may prevent the I/O module from being recognized correctly. Also, do not set JP1 to 10 Mbps and do not set JP2 to 32 bytes. If 10 Mbps and 32 bytes are selected, the I/O module is not recognized.

4 Mounting the XOI01B Board



WARNING

- Before wiring, be sure to turn OFF the power supply and put up a warning sign, such as "DO NOT TURN ON THE POWER".

Failure to observe this warning may result in an electric shock or an injury.

- Do not touch the inside of the panel for 5 minutes after the power is turned OFF.

The remaining charged voltage in the capacitor may cause an electric shock or an injury.

- Be sure to close the door and install the protection cover while the power is turned ON.

Failure to observe this warning may result in a fire or an electric shock.



CAUTION

- The wiring and mounting must be performed by authorized and qualified personnel.

Failure to observe this caution may result in a fire or an electric shock.

- Make sure that there is no foreign matter such as metal chips on the board.

In case of malfunction, etc. it may result in an injury or damage the board.

- Make sure that there is no damage or deflection of parts on the board.

In case of malfunction, etc. it may result in an injury or damage the board.

- Correctly connect each cable and connector.

Failure to observe this caution may result in a fire or damage the board.

- Set the switches, etc. correctly.

In case of malfunction, etc. it may result in an injury or damage the board.

- Never touch the mounting surfaces and the soldered surfaces of the board parts directly with fingers.

The generated static electricity may damage the IC, and protrusions on the soldered surface may result in an injury.

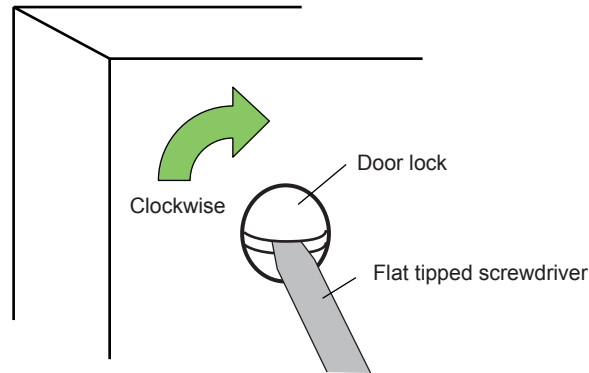
- Never give any shock to the board.

The shock may damage the board.

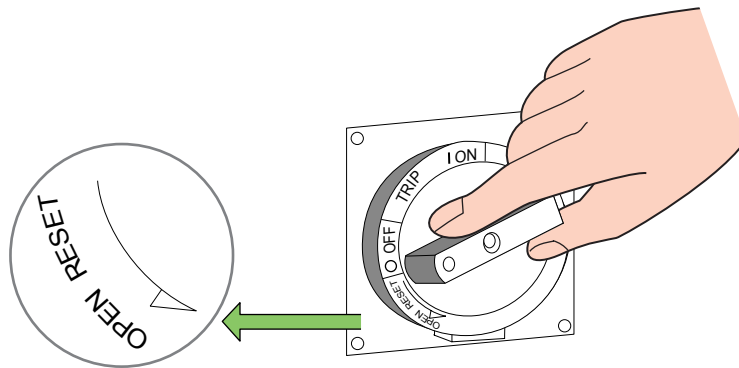
4.1 Opening Front Door of the XRC

Mount the XOI01B board in the following manner.

1. Turn the two door locks on the front face of the XRC clockwise for 90° with a coin or a flat-tipped screwdriver.



2. With the door locks turned clockwise for 90°, turn the main switch handle to the "OPEN RESET" position, and slowly open the door.



4.2 Confirming the Switch Settings on the XOI01B Board

1. Be sure that the settings of switches on the board are correct.
2. For the switch settings, refer to " 3 Setting the Functions ".

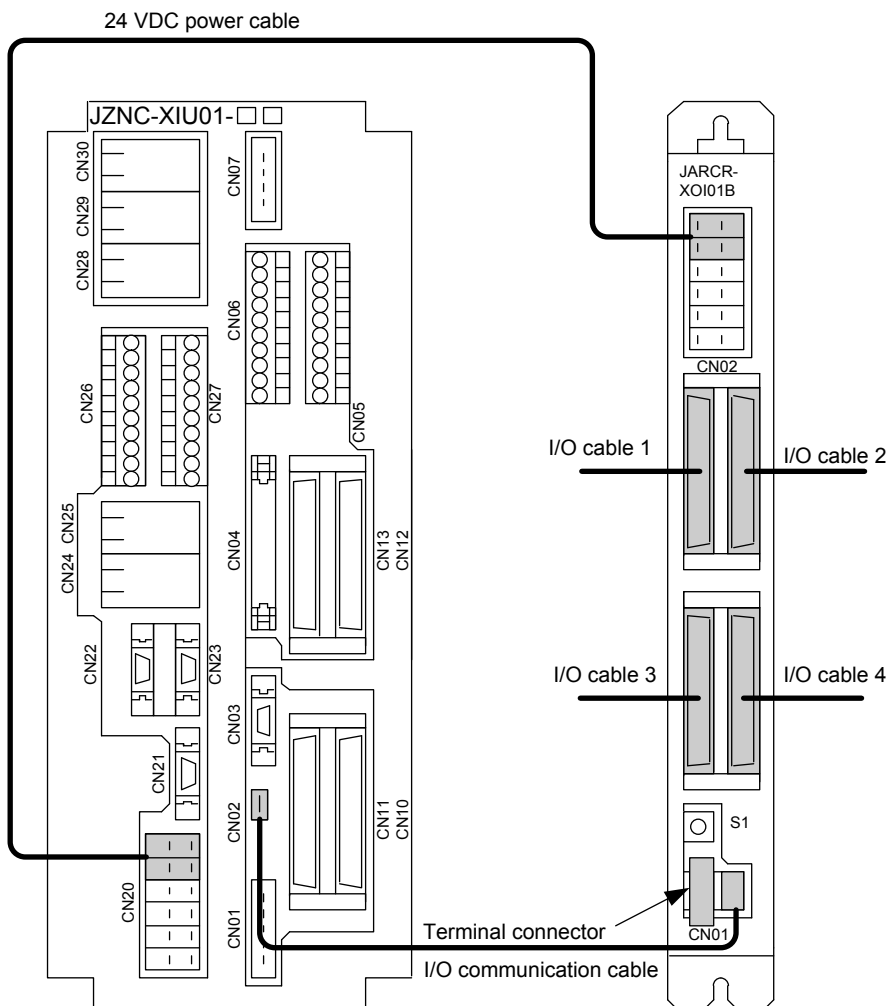
4.3 Mounting the XOI01B Board on the XRC

1. Be sure that the main power supply is OFF.
2. Fix the XOI01B board on the XRC with the board fixing screws securely tightened.

4.4 Connecting Each Cable

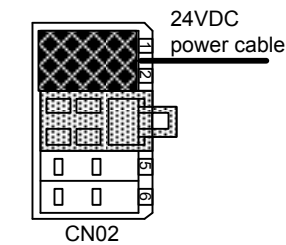
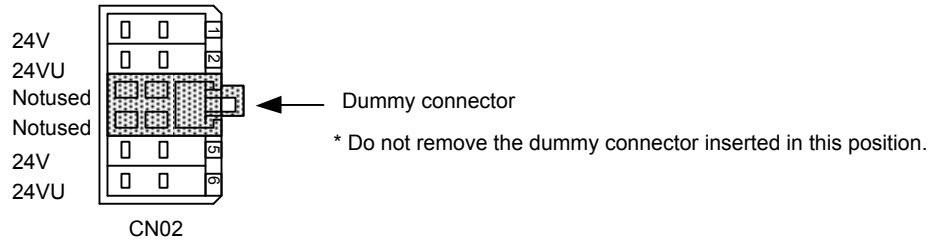
4.4 Connecting Each Cable

1. Connect the 24 VDC power supply cable to the CN02 on the XOI01B board.
2. Connect the I/O communication cable to the CN01 on the XOI01B board. Disconnect the terminal connector from CN02 on the JZNC-XIU01 unit, and connect it to the non-occupied CN01 on the XOI01B board.
3. Connect the I/O cables to CN10 through CN13 on the XOI01B board.

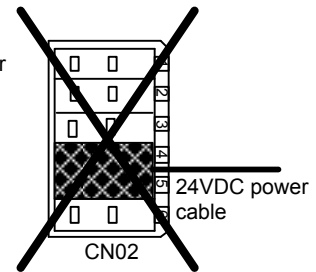
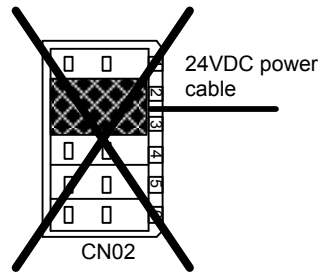




A dummy connector is inserted into the CN02 of the 24 VDC power supply connector on the XOI01B board. Do not remove this connector because it is inserted to prevent incorrect cable connections. Removing this connector may result in incorrect connection of the 24 VDC power cable to the CN02. This prevents power from being supplied normally to the board, and the board may not start up.



Correct Connecting Position



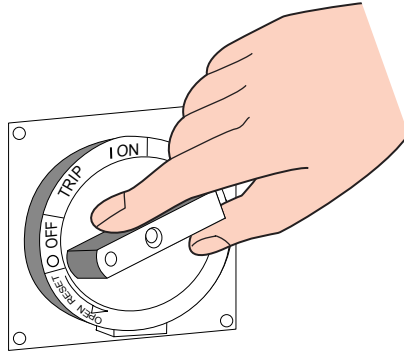
Incorrect Connecting Position

* Because the dummy connector is removed, the 24VDC power cable is incorrectly connected, and power cannot be supplied to the board.

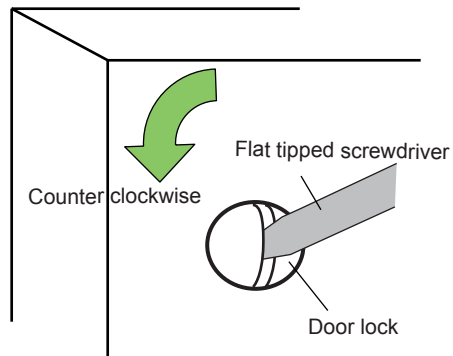
4.5 Closing the Front Door of the XRC

4.5 Closing the Front Door of the XRC

1. Turn the main switch handle, which is now in the OFF position, to the "OPEN RESET" position, and then slowly close the door.



2. Turn the two door locks counterclockwise for 90°.



5 I/O Signal Allocation

5.1 I/O Module Setting

In order to use a XOI01B board on the XRC, perform the I/O module setting in the following manner.

Make sure that the power supply to the XRC is OFF. Then, mount the XOI01B board, for which all of its switches have been set, inside the XRC. For the board mounting method, refer to " 4 Mounting the XOI01B Board ".



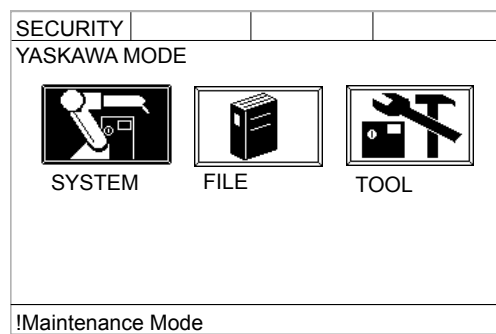
Add an I/O module in the management mode.
In the operation mode and the editing mode, the settings are for reference only.

Operation

Turn ON the power supply, pressing [TOP MENU] ➔ Set the mode to the "MANAGEMENT MODE" ➔ Select {SYSTEM} from the top menu^{*1} ➔ Select {SETUP}^{*2} ➔ Select {I/O MODULE}^{*3} ➔ Confirm the status of the mounted I/O module^{*4} ➔ Press [ENTER] ➔ Press [ENTER] ➔ Select "YES"^{*5}

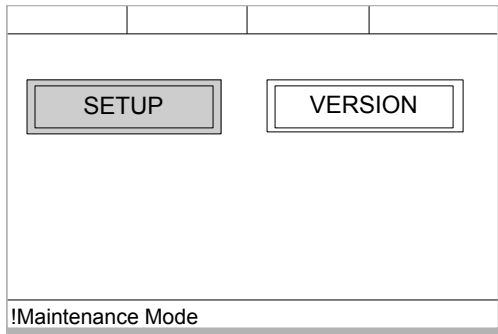
Explanation

- ^{*1} When the top menu appears, change the security mode to the "MAINTENANCE MODE". Then select {SYSTEM}.

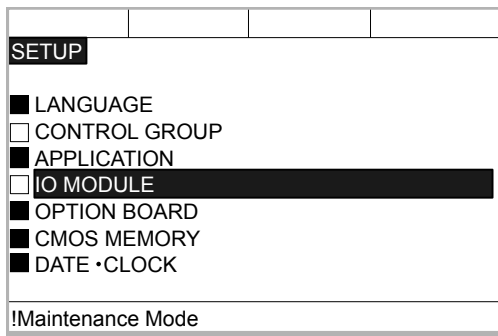


5.1 I/O Module Setting

- *2 Move the cursor to {SETUP} in the system display and press [SELECT].

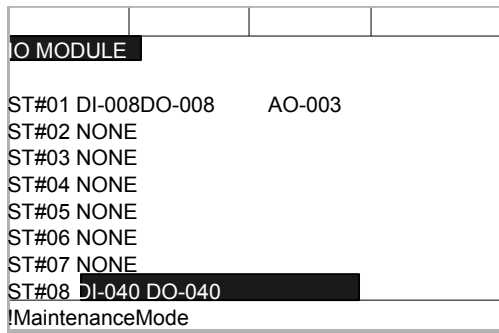


- *3 Select the {I/O MODULE} in the setup display.



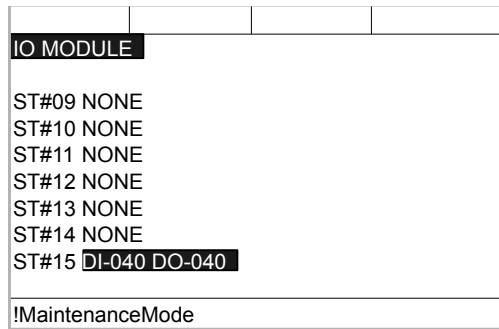
The items marked with n cannot be used.

- *4 The current mounted status of the I/O modules appears as in the following example.



JANCD-XEW01S1 :(1)
 JARCR-XOI01BS1 :(8)

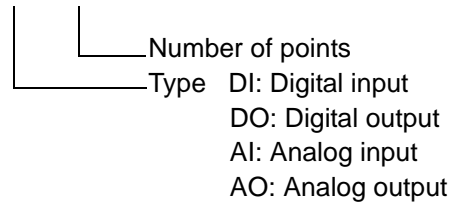
Press [ENTER] to display the module mounted status for the rest of the stations.



JANCD-XIO01 (XIO02)

Confirm that each station (ST#) indicates the actual mounted status of the I/O module.

DI - 016



In the example shown on the display, the configuration of boards are as follows. Both "ST#08" and "ST#15" show "DI-040 DO-040", because the numbers of I/O points on the XOI01 board and the XIO01 (XIO02) are the same; DI-040 DO-040.

ST#01: JANCD-XEW01 board (digital input 8 points, digital output 8 points, analog output 3 points)

Switch S1: Set to 1 (this value becomes the ST#.)

ST#08: XOI01B board (digital input 40 points, digital output 40 points)

Switch S1: Set to 8 (this value becomes the ST#.)

ST#15: XIO01 (XIO02) board (digital input 40 points, digital output 40 points)

This board is fixed to ST#15.



If the display does not indicate the actual mounted status, recheck the cable connection and the switch setting.

If the mounted status is correct (but the display does not correspond), the following causes are suspected.

- Improper I/O communication settings

The settings of JP1 and JP2 on the XOI01B board and CN10 on the XIO01 board are not the same. When these settings are different, the XRC cannot recognize the board.

The default setting of the XOI01B board is 16-byte mode.

When the XIO01 board is set to 17-bytes, reset the XOI01B board to 17-bytes.

- Improper or overlapped station settings

One optional board can be selected for each station. Check if SW1 is not used for a board by changing the S1 setting. S1 cannot be set to 0, because no station is allocated to 0.

(S1: F (ST#15) is only for the XIO01 (XIO02) board. Do not select it for other boards.)

- Non-applicable system software versions

Old system software versions are not applicable for the XOI01B board. With old system software versions, even with the correct settings, the number of I/O points for the XOI01B board does not appear. Check the system software version number, and change to software applicable for the board. Use system software version X1.80A (xx)-00 or later.

- Improper connection of the 24 VDC power cable and the I/O communication cable

The 24 VDC cable and the I/O communication cable may not be connected properly.

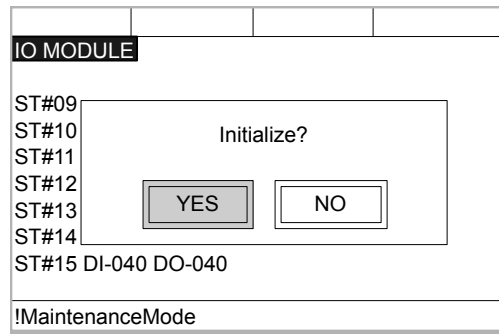
Recheck the cable connection referring to " 4.4 Connecting Each Cable " Improper connection of the 24 VDC power cable to the CN02 may prevent the board from starting up.

- I/O module failure

When the above causes do not apply, and the display still does not correspond to the actual mounted status, failure of an I/O module is suspected. Contact your YASKAWA representative.

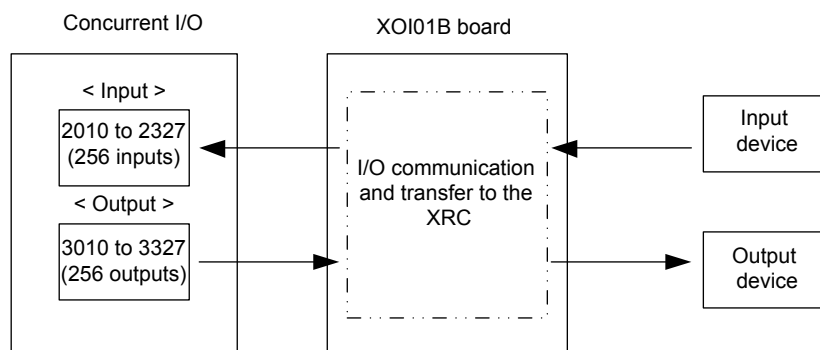
5.2 I/O Data

- *5 The confirmation dialog box appears. When the mounted status of an I/O module is correct, select "YES". The I/O module setting is updated, and an I/O module is added.



5.2 I/O Data

The data to be transferred from the XOI01B board to the inside of the XRC is of 40 input points (5 bytes) and 40 output points (5 bytes). The I/O data of the XOI01B board is allocated to external I/O signals of concurrent I/O.



When only a XOI01B board is mounted as an optional I/O board, the concurrent I/O allocation of each board is as follows.

(2010 to 2057 and 3010 to 3057 are used for standard I/O of the XRC.)

Input	Output
2060 to 2067: CN12	3060 to 3067: CN12
2070 to 2077: CN12, 13	3070 to 3077: CN12, 13
2080 to 2087: CN13	3080 to 3087: CN13
2090 to 2097: CN10	3090 to 3097: CN10
2100 to 2107: CN11	3100 to 3107: CN11

6 I/O Circuits

NOTE

- When an internal power supply is used for the I/O power supply, the allocation to the 24 VDC internal power supply of the XRC is approximately 1 A. If the total current consumption of the I/O circuits including that of other I/O boards (such as the XIO02 board) exceeds 1 A, use an external power supply.
- When an external power supply is used for the I/O power supply and the total current consumption of the I/O circuits exceeds 2 A, use a 24 VDC external power supply. However, do not use the 24 VDC power supply from CN10 and CN11 for the 24 VDC power supply used at the relay output contact.
- The I/O circuits of the XOI01B board are exclusive-use for 24 VDC. Connecting a power supply other than 24 VDC causes damages to the circuits and malfunction.

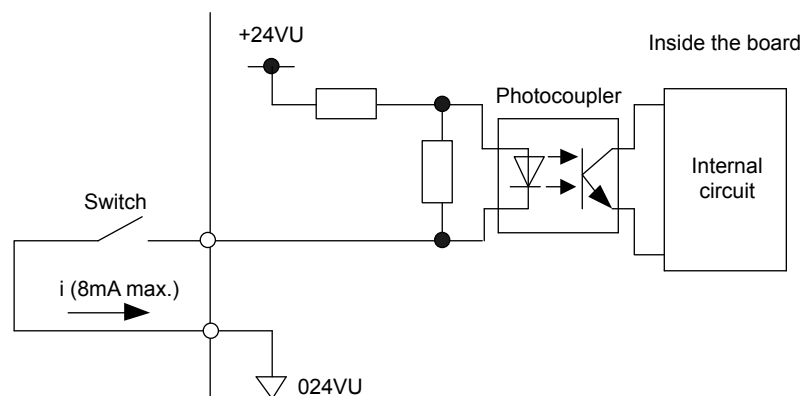
6.1 Input Circuit

The input circuit has 40-points, and all for input circuit 1.

6.1.1 Input Circuit 1 (CN10 to CN13)

Circuit structure	Input circuit with photocoupler insulation
Current (max.)	8 mA per one point
Common	+ 24V common

Connection example



6.2 Output Circuits

The output circuit has 40 points from CN10 through CN13. Two types of circuits are provided: transistor output (24 points) and relay output (16 points). When the contact life of a relay should be considered because of frequent ON/OFF switchings, the transistor output can be used to control a relay mounted on an easily accessible position or a non-contact relay SSR (solid state relay).

NOTE

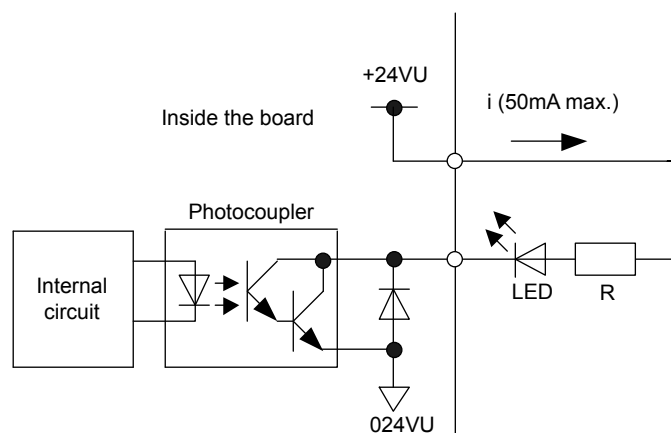
When connecting an induction load to the output circuit, connect a fly-wheel diode in parallel to the induction load, to suppress the surge voltage. Not using a fly-wheel diode may damage the output circuit.

When connecting a load with a large inrush current such as a lamp, connect a current limiting resistance in series to the load, so that the output current does not exceed its maximum value. Exceeding the maximum output current value may damage the output circuit.

6.2.1 Output Circuit 1 CN12 and CN13 (Transistor Output)

Circuit structure	Transistor open-collector output
Output current (max.)	50 mA per one point
Common	+24 V common

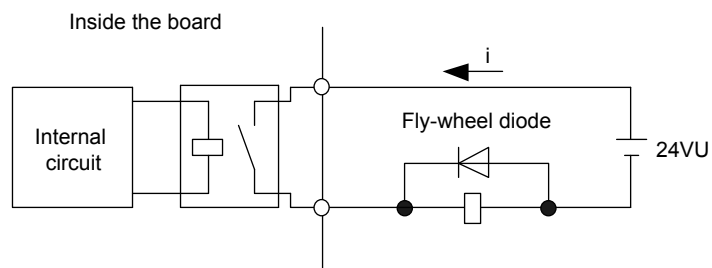
Connection example



6.2.2 Output Circuit 2 CN10 and CN11 (Relay Output)

Circuit structure	Relay contact output (only DC load can be connected)
Output current (max.)	0.5 A per point
Common	None (determined according to the external connection)
Contact resistance	30 mΩ or less
Min. applicable load for contact	0.1 VDC, 0.1 mA
Relay life	Electrical life: 300,000 times (with inductive load 24 VDC, 0.5 A) Mechanical life: 20,000,000 times

Connection example

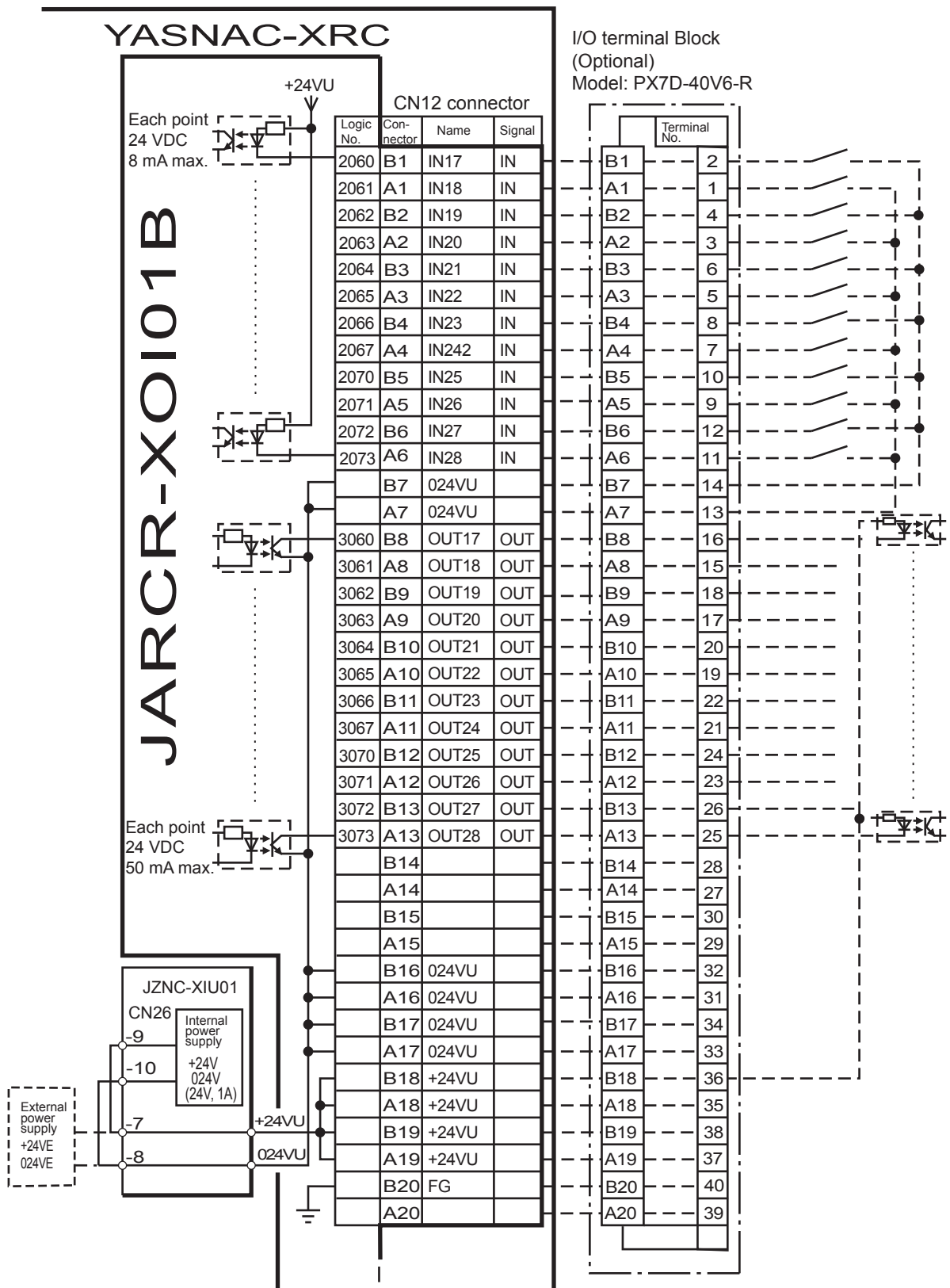


6.3 Connection Example

The following are allocation examples when the XOI01B board is added to the XRC: arc-welding, handling, and general-purpose applications; and spot-welding applications. These examples are applied when only one XOI01B board is used as an optional I/O board. When any other optional I/O boards are added, the XOI01B board allocation will be changed depending on the I/O board allocation.

6.3.1 Arc Welding, Handling, and General-purpose Applications

CN12 General-purpose I/O
(for arc welding, handling, and general-purpose applications)

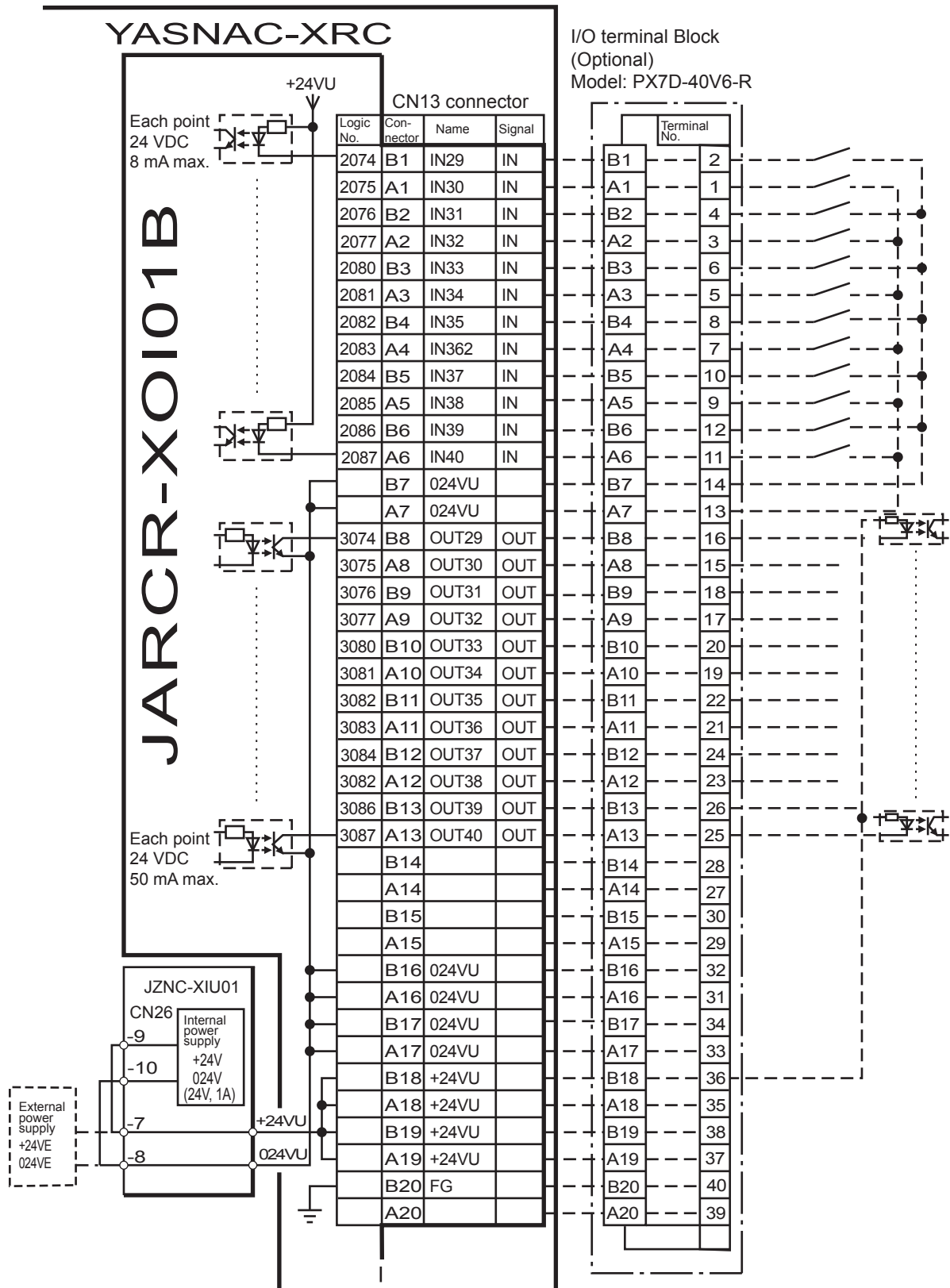


* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

6.3 Connection Example

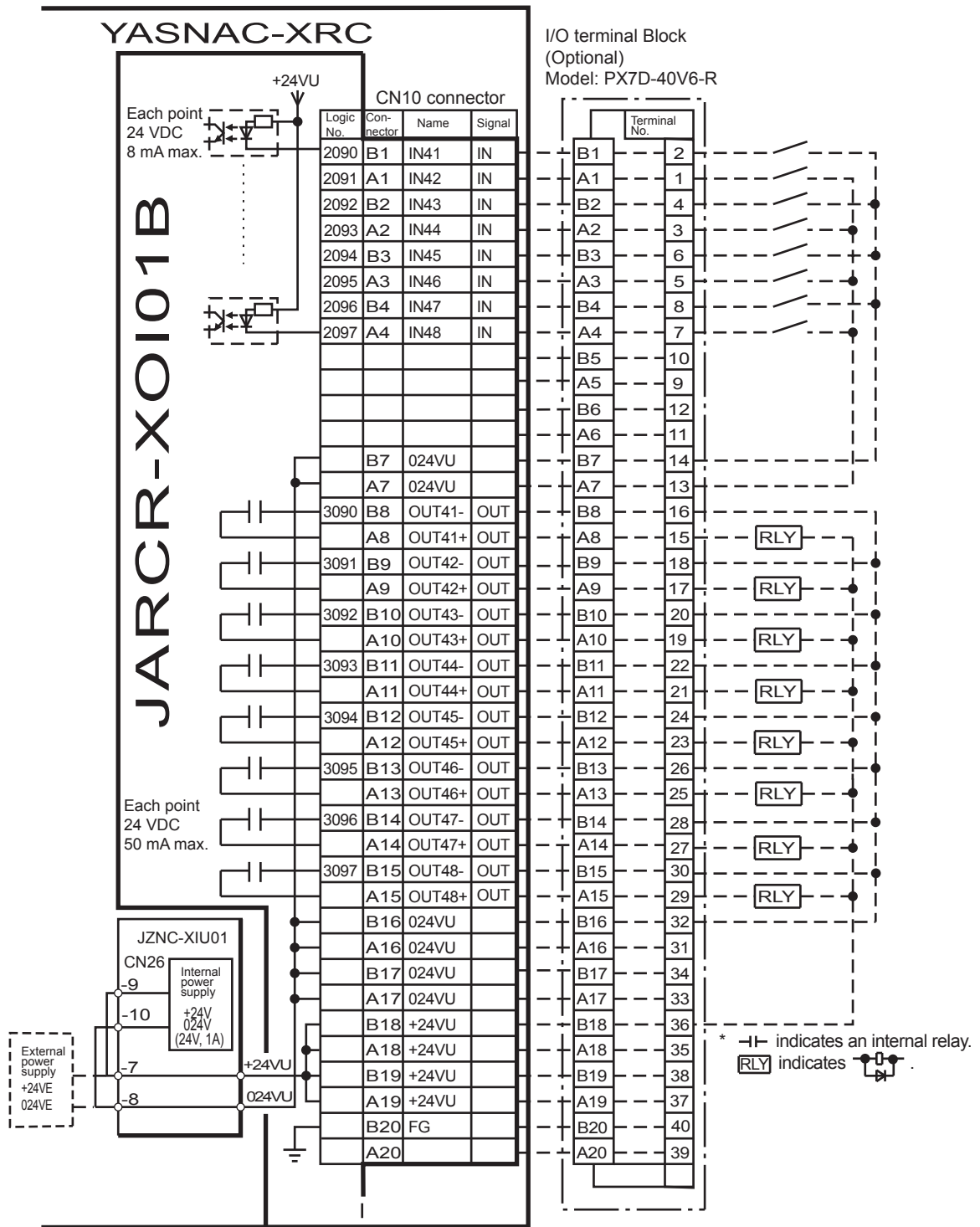
CN13 General-purpose I/O

(for arc welding, handling, and general-purpose applications)



* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

CN10 General-purpose I/O
(for arc welding, handling, and general-purpose applications)

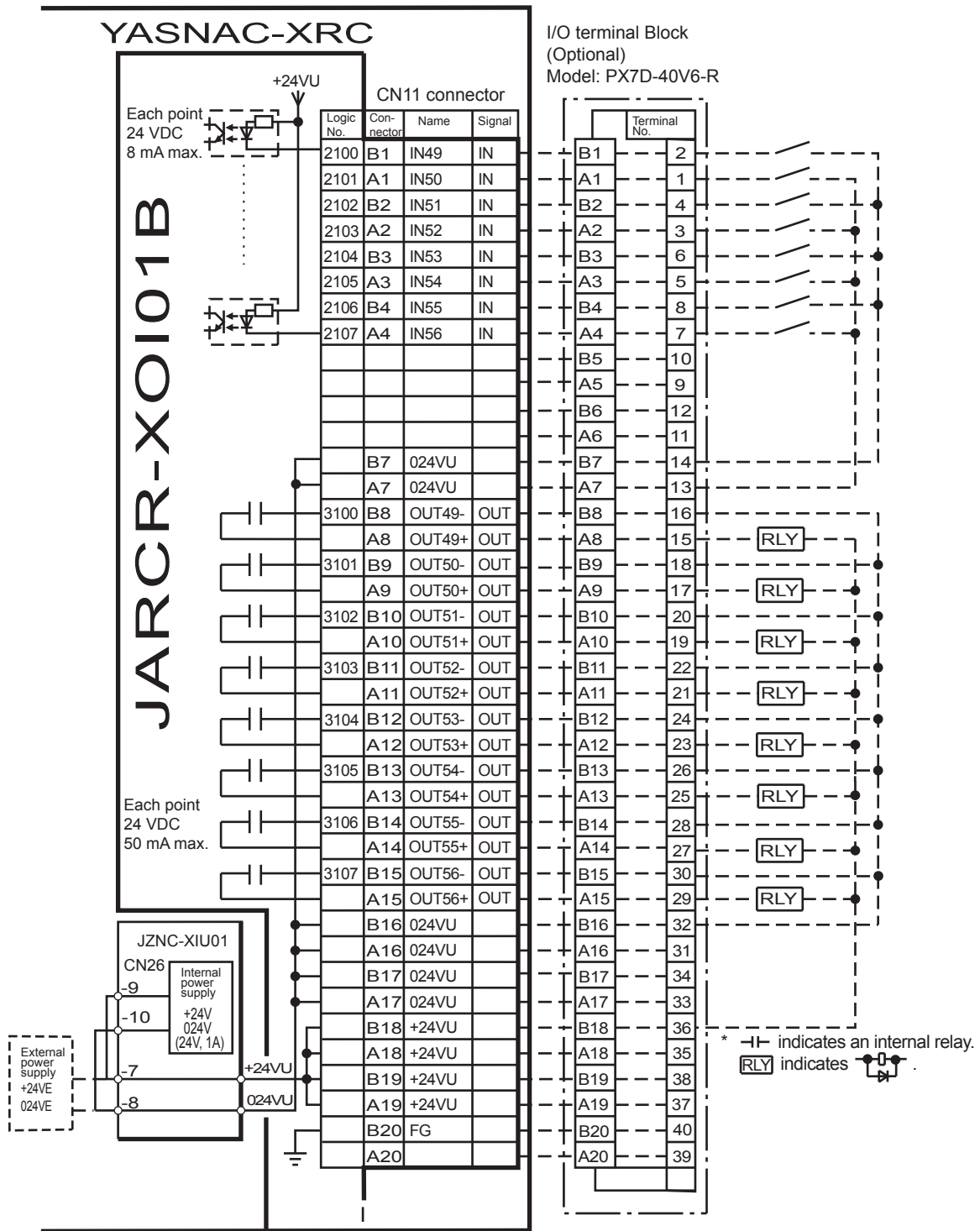


* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

6.3 Connection Example

CN11 General-purpose I/O

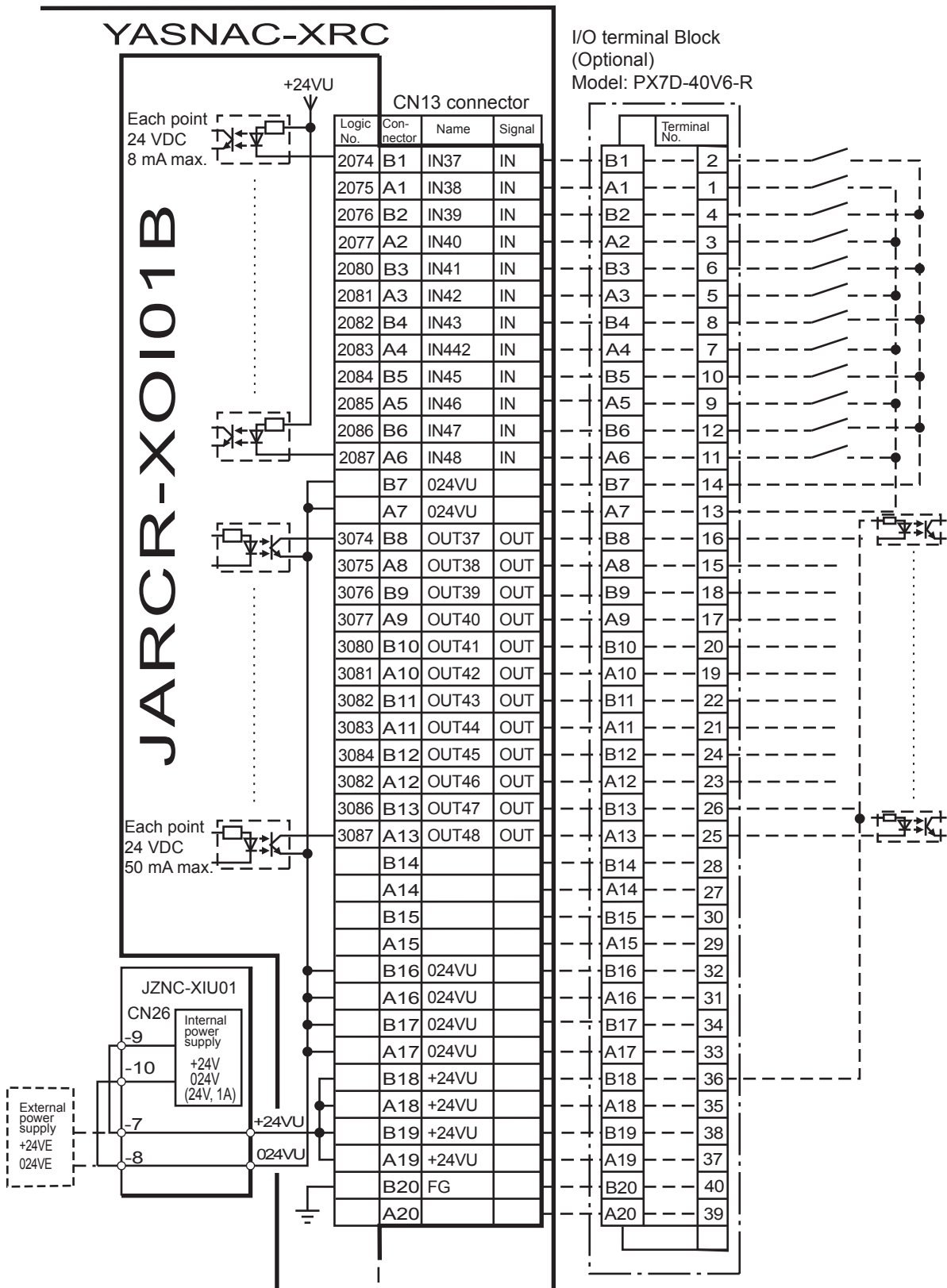
(for arc welding, handling, and general-purpose applications)



* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

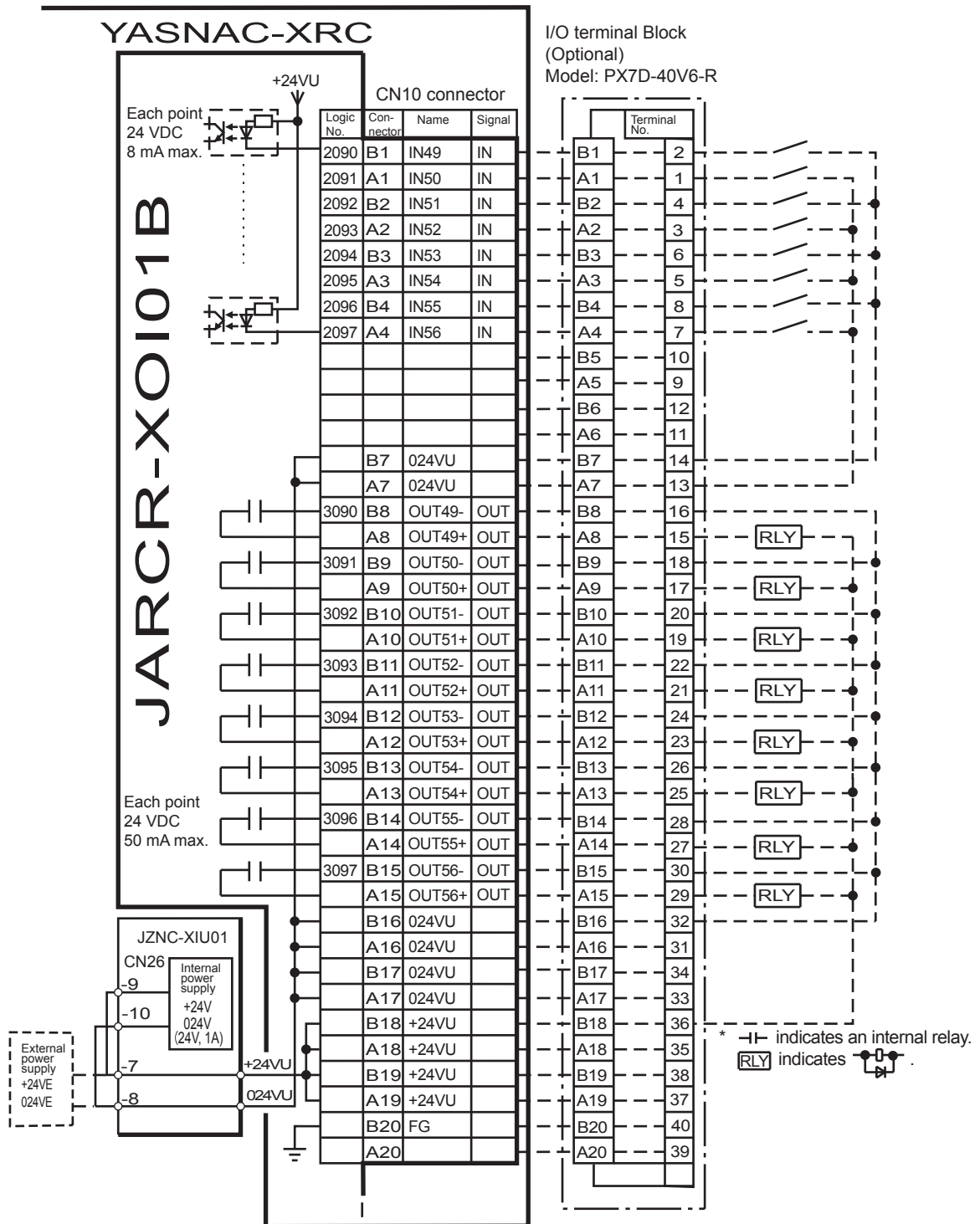
6.3 Connection Example

CN13 General-purpose I/O (for spot welding)



* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

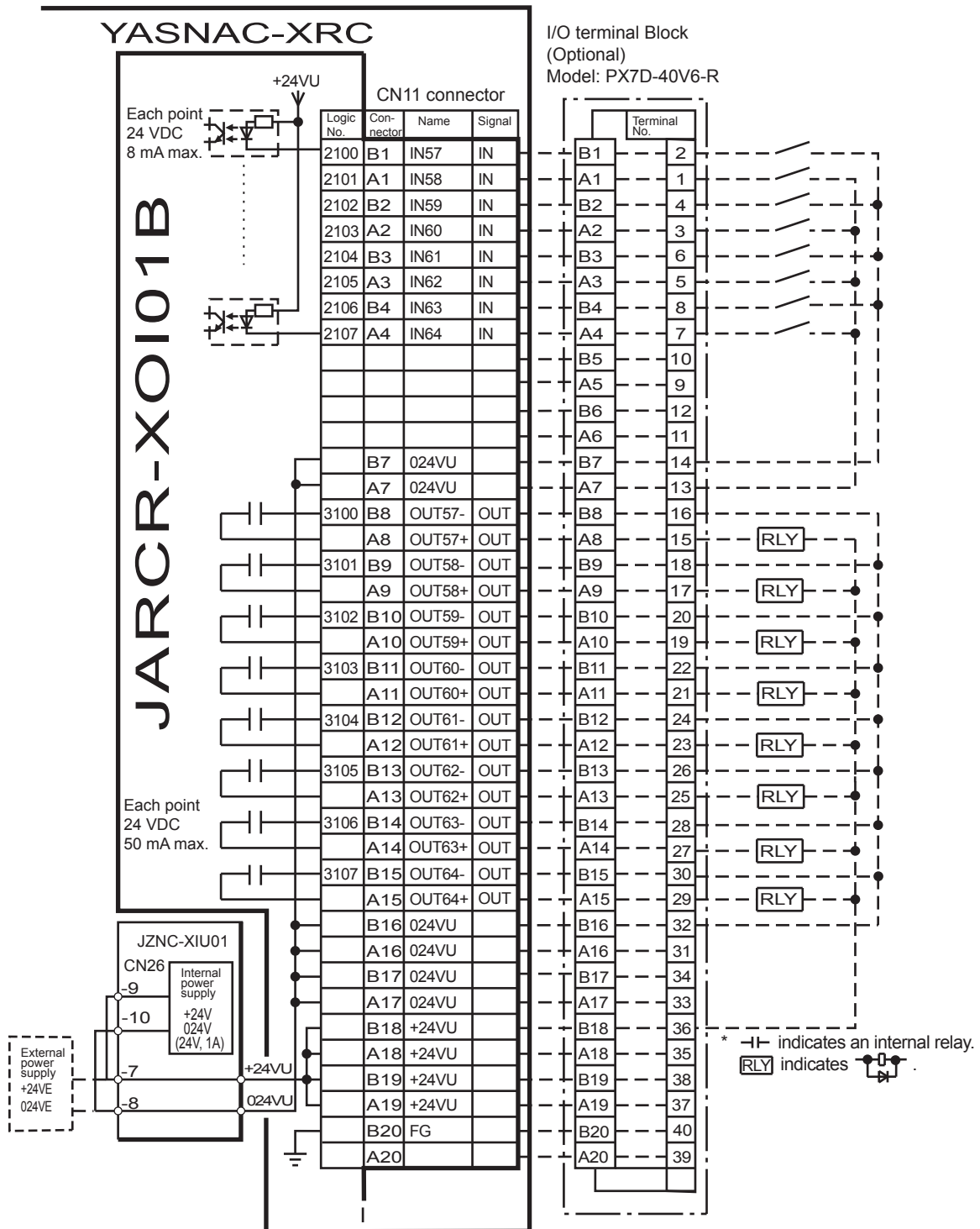
CN10 General-purpose I/O (for spot welding)



* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

6.3 Connection Example

CN11 General-purpose I/O (for spot welding)



* Remove the jumper lead between CN26-9 and -7 and between CN-10 and -8 on the JZNC-XIU01 when an external power supply is used.

YASNAC XRC OPTIONS INSTRUCTIONS

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