

Basic I/O Selection

This section describes the standard and high-density input and output modules, terminal blocks and cables used in a CJ1 system.

Input Configuration

What input voltage do you need?

Type	DC Inputs	AC Inputs
Model number	CJ1W-ID2□□ CJ1W-MD□□□	CJ1W-IA□□□
See page	B-37, B-54	B-37

How many input points are required?

Choose from the available point densities below.

Input Points	8	16	32	64
DC inputs	CJ1W-ID201	CJ1W-ID211	CJ1W-ID231 CJ1W-ID232 CJ1W-MD231 CJ1W-MD232 CJ1W-MD233	CJ1W-ID261 CJ1W-ID262 CJ1W-MD261 CJ1W-MD263 CJ1W-MD563
AC inputs	CJ1W-IA201	CJ1W-IA111	—	—
See page	B-37	B-37	B-37, B-54	B-37, B-54

What are the input current requirements?

Input Current	3.5 mA or Below	4.1 mA or Below	7 mA or Below	9 mA or Below	10 mA or Below
DC inputs	CJ1W-MD563	CJ1W-ID231 CJ1W-ID232 CJ1W-ID261 CJ1W-ID262 CJ1W-MD261 CJ1W-MD263	CJ1W-ID211 CJ1W-MD231 CJ1W-MD232 CJ1W-MD233	—	CJ1W-ID201
AC inputs	—	—	CJ1W-IA111	CJ1W-IA201	—
See page	B-54	B-37, B-54	B-37, B-54	B-37	B-37

Are terminal blocks and connection cables necessary?

Input modules with 8 or 16 points have built-in terminal strips that accept direct wiring from input devices. High-density 32- and 64-point modules use cables and terminal blocks to connect inputs and consolidate wiring back to the control panel. For more information, see pages B-37 to B-38.

Module	Connector Type	Terminal Block	Cable
CJ1W-IA111	Removable screw terminal strip	Not required	Not required
CJ1W-IA201			
CJ1W-ID211			
CJ1W-ID231	Fujitsu connector on module	XW2B-40G4 or XW2B-40G5	XW2Z-□□□B
CJ1W-MD231			
CJ1W-ID261		Two XW2B-40G4 or XW2B-40G5	Two XW2Z-□□□B
CJ1W-MD261			
CJ1W-ID232	MIL-type flat ribbon connector on module	XW2B-40G4 or XW2B-40G5	XW2Z-□□□K
CJ1W-MD233			
CJ1W-ID262		Two XW2B-40G4 or XW2B-40G5	Two XW2Z-□□□K
CJ1W-MD263			
CJ1W-MD563			

Note: For more information on wiring connections, please refer to the wiring section starting on page D-1.

Output Configuration

How many output points are required?

Choose from the available point densities below.

Output Points	8	16	32	64	See page
Transistor	CJ1W-OD20□	CJ1W-OD21□	CJ1W-OD23□	CJ1W-OD26□	B-44
			CJ1W-MD23□	CJ1W-MD26□	B-54
Relay	CJ1W-OC201	CJ1W-OC211	–	–	B-44
Triac	CJ1W-OA201	–	–	–	B-44
TTL	–	–	–	CJ1W-MD563	B-54

If transistor output, do you need sinking (NPN) or sourcing (PNP) outputs?

Output Points	8	16	32	64	See page
Sinking outputs	CJ1W-OD201	CJ1W-OD211	CJ1W-OD231	CJ1W-OD261	B-44
	CJ1W-OD203		CJ1W-OD233	CJ1W-OD263	B-44
			CJ1W-MD231	CJ1W-MD261	B-54
			CJ1W-MD233	CJ1W-MD263	B-54
Sourcing outputs	CJ1W-OD202	CJ1W-OD212	CJ1W-OD232	CJ1W-OD262	B-44
	CJ1W-OD204				B-44

Are terminal blocks and connection cables necessary?

Output modules with 8 or 16 points have built-in terminal strips that accept direct wiring from output devices. High-density 32- and 64-point modules use cables and terminal blocks to connect outputs and consolidate wiring back to the control panel. For more information, see pages B-45 to B-46.

Module	Connector Type	Terminal Block	Cable
CJ1W-OC201	Removable screw terminal strip	Not required	Not required
CJ1W-OC211			
CJ1W-OD20□			
CJ1W-OD21□			
CJ1W-OD231	Fujitsu connector on module	XW2B-40G4 or XW2B-40G5	XW2Z-□□□B
CJ1W-MD231			
CJ1W-OD261		Two XW2B-40G4 or XW2B-40G5	Two XW2Z-□□□B
CJ1W-MD261			
CJ1W-OD232	MIL-type flat ribbon connector on module	XW2B-40G4 or XW2B-40G5	XW2Z-□□□K
CJ1W-MD233			
CJ1W-OD262		Two XW2B-40G4 or XW2B-40G5	Two XW2Z-□□□K
CJ1W-MD263			
CJ1W-OD263			
CJ1W-MD563			

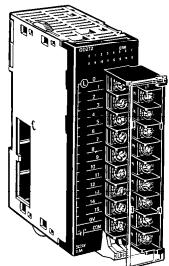
Note: For more information on wiring connections, please refer to the wiring section starting on page D-1.

Configuration Guidelines

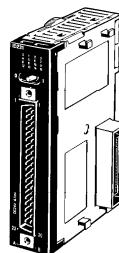
Remember to add all the current consumptions of basic I/O and special I/O modules, and CPU bus units to determine which power supply is appropriate.

If there are more than 10 modules involved or the current consumption exceeds the capability of the available power supplies, go to page B-109 in the **System Power and Expansion** section for configuration of I/O expansion racks.

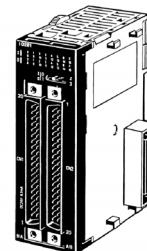
For more I/O options, see the **Industrial Networking** section for DeviceNet I/O on page B-88 and CompoBus/S I/O on page B-97.



Input Modules (8/16 points)
CJ1W-ID201
CJ1W-ID211
CJ1W-IA□□□



Input Modules (32 points)
CJ1W-ID23□



Input Modules (64 points)
CJ1W-ID26□

■ DC Input Modules

Classification	Input voltage	Inputs	Connector type	Input current	Model
Basic I/O Module	12-24 VDC	8 pts	Removable terminal block	10 mA	CJ1W-ID201
	24 VDC	16 pts	Removable terminal block	7 mA	CJ1W-ID211
		32 pts	Fujitsu-compatible connector	4.1 mA	CJ1W-ID231
		32 pts	MIL connector	4.1 mA	CJ1W-ID232
		64 pts	Fujitsu-compatible connector	4.1 mA	CJ1W-ID261
		64 pts	MIL connector	4.1 mA	CJ1W-ID262

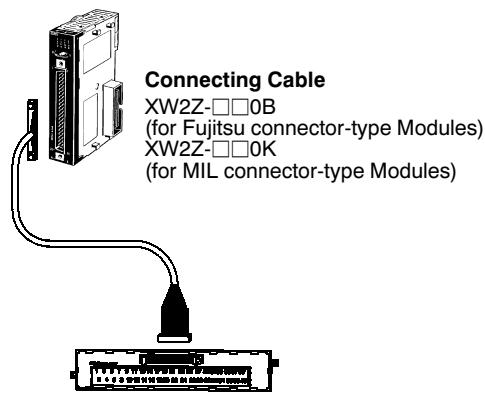
■ AC Input Modules

Classification	Input voltage	Inputs	Connector type	Input current	Model
Basic I/O Module	100 to 120 VAC	16 pts	Removable terminal block	7 mA (100 V, 50 Hz)	CJ1W-IA111
	200 to 240 VAC	8 pts		9 mA (200 V, 50 Hz)	CJ1W-IA201

■ Wiring and Cabling Examples

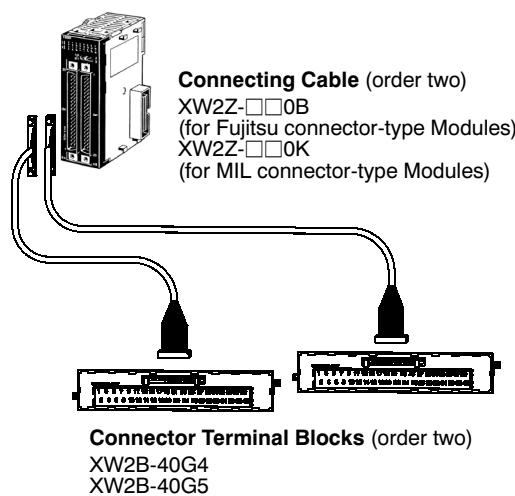
32-Point Input Modules

CJ1W-ID23□



64-Point Input Modules

CJ1W-ID26□

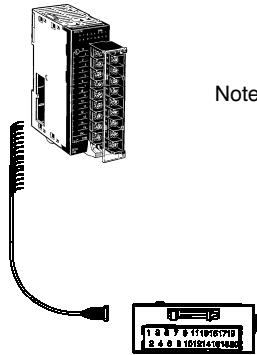


Additional Information: For more details and specifications on cables and terminal blocks, refer to manual No. W393 or check the Wiring Solutions section of this catalog for more options.

Input Modules

Wiring and Cabling Examples (continued)

8-Point and 16-Point Input Modules (Optional)
CJ1W-ID211, CJ1W-IA□□1, and CJ1W-ID201



Note: Since the 8- and 16-point I/O Modules have integrated screw terminals, this wiring configuration is necessary only if you are connecting to Omron XW2B Terminal Blocks.

Connector Terminal Blocks
XW2B-20G4
XW2B-20G5

Connecting Cable

XW2Z-□□0F

(cable terminated with crimp hooks)

■ Input Module Circuit Configuration and Terminal Arrangement

CJ1W-ID201

Circuit configuration	Terminal arrangement

Input Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-ID211

Circuit configuration	Terminal arrangement
<p>Input indicator</p>	<p>24 VDC</p>

CJ1W-ID231

Circuit configuration		Terminal arrangement																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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Basic I/O Modules

OMRON

Input Modules

Input Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-ID232

Circuit configuration	Terminal arrangement
<p>Word m</p> <p>Word m+1</p> <p>Input indicator</p>	<p>Word m+1</p> <p>Word m</p> <p>Internal circuits</p>

CJ1W-ID261

Circuit configuration

The circuit diagram shows four words (Word m, Word m+1, Word m+2, Word m+3) connected to a common ground rail. Each word has two input channels, CN1 and CN2, each consisting of two inputs (IN00, IN15) and two outputs (COM0, COM1 for CN1; COM2, COM3 for CN2). The inputs are connected through resistors (5.6kΩ) and capacitors (1.000pF) to a central node. This node is connected to a switch (SW), a 560Ω resistor, and a ground rail. The output of the switch is connected to an indicator switching circuit, which then connects to internal circuits. The internal circuits are shown as dashed boxes.

Terminal arrangement

The terminal arrangement diagram shows the physical connection of the words to a power source (24 VDC) and ground. Word m+1 is connected to terminals A and B. Word m is connected to terminals A and B. Word m+2 is connected to terminals A and B. Word m+3 is connected to terminals A and B. The terminals are numbered 0 through 24. The connections are summarized in the following table:

Word	Terminal A	Terminal B
Word m+1	20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1	20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
Word m	19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1	19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
Word m+2	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
Word m+3	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Input Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-ID262

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows four parallel input channels. Each channel consists of two inputs (IN00 and IN15), a common COM terminal, and a switch labeled 'SW'. The switches are connected in series with the inputs. Each channel also contains an 'Indicator switching circuit' and 'Internal circuits'. The channels are grouped into words: Word m (CN1), Word m+1 (CN1), Word m+2 (CN2), and Word m+3 (CN2).</p>	<p>The terminal arrangement shows four sets of terminal blocks (CN1, CN2, CN3, CN4) corresponding to the four words of inputs. Each set includes a 24 VDC power source and various terminals labeled with numbers 0 through 40. The connections are as follows:</p> <ul style="list-style-type: none"> CN1: Word m (Terminals 0-21), Word m+1 (Terminals 22-37), COM0 (Terminal 24), NC (Terminal 25), 24 VDC (Terminal 26). CN2: Word m+2 (Terminals 0-19), Word m+3 (Terminals 20-37), COM1 (Terminal 24), NC (Terminal 25), 24 VDC (Terminal 26). CN3: Word m+1 (Terminals 22-37), COM2 (Terminal 24), NC (Terminal 25), 24 VDC (Terminal 26). CN4: Word m+2 (Terminals 0-19), Word m+3 (Terminals 20-37), COM2 (Terminal 24), NC (Terminal 25), 24 VDC (Terminal 26).

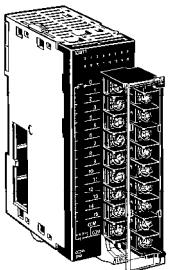
CJ1W-IA111

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows a single input channel. It consists of two inputs (IN00 and IN15), a common COM terminal, and a switch labeled 'SW'. The switch is connected in series with the inputs. The circuit also includes resistors (470Ω, 1MΩ, 270Ω) and capacitors (0.22μF, 0.15μF) for filtering. Internal circuits are shown connected to the inputs.</p>	<p>The terminal arrangement shows a single set of terminal blocks for the input channel. The connections are as follows:</p> <ul style="list-style-type: none"> Terminals 0-14 are labeled A0-A7. Terminal 15 is labeled B0. Terminal 16 is labeled B1. Terminal 17 is labeled B2. Terminal 18 is labeled B3. Terminal 19 is labeled B4. Terminal 20 is labeled B5. Terminal 21 is labeled B6. Terminal 22 is labeled B7. Terminal 23 is labeled B8. Terminal 24 is labeled COM. A 100 to 120 VAC power source is connected between terminals 0 and 24.

CJ1W-IA201

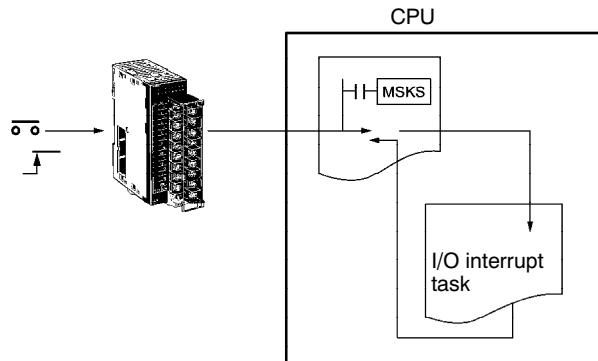
Circuit configuration	Terminal arrangement
<p>The circuit diagram shows a single input channel. It consists of two inputs (IN00 and IN07), a common COM terminal, and a switch labeled 'SW'. The switch is connected in series with the inputs. The circuit also includes resistors (820Ω, 1MΩ, 220Ω) and capacitors (0.15μF, 0.05μF) for filtering. Internal circuits are shown connected to the inputs.</p>	<p>The terminal arrangement shows a single set of terminal blocks for the input channel. The connections are as follows:</p> <ul style="list-style-type: none"> Terminals 0-14 are labeled A0-A7. Terminal 15 is labeled B0. Terminal 16 is labeled B1. Terminal 17 is labeled B2. Terminal 18 is labeled B3. Terminal 19 is labeled B4. Terminal 20 is labeled B5. Terminal 21 is labeled B6. Terminal 22 is labeled B7. Terminal 23 is labeled B8. Terminal 24 is labeled COM. A 200 to 240 VAC power source is connected between terminals 0 and 24.

Interrupt Input Module



CJ1W-INT01

■ System Configuration



■ Features

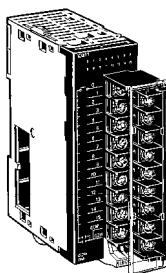
- High-speed response for interrupt task execution: 0.37 ms OFF to ON and 0.82 ms ON to OFF.
- When an input on the Interrupt Input Module turns ON, the CPU is notified immediately, cyclic task execution is interrupted, and an I/O interrupt task is executed.

■ Specifications

Module	Model	Input voltage	Inputs	Input signal pulse width	No. of mountable modules	Mounting location	External connections
Interrupt Input Module	CJ1W-INT01	24 VDC	16 inputs	ON: 0.05 ms min. OFF: 0.5 ms min.	2 max.	Any of the 5 slots next to the CPU on the CPU Rack.	Removable terminal block

Circuit configuration	Terminal connections
<p>The circuit diagram shows the internal logic of the module. It includes two input terminals (IN00 and IN15) connected to a common COM terminal. A diode is connected between IN00 and COM. A resistor is connected between IN15 and COM. A capacitor is connected between the two input lines. A switch is connected between the two input lines. A diode is connected between the switch and the internal indicator. The internal indicator is connected to ground. The output of the internal indicator is connected to the 'Internal circuits' block.</p>	<p>The terminal connections diagram shows the physical pinout of the CJ1W-INT01 module. Pin 1 is COM, pins 2 through 15 are inputs labeled A0 through A7 and B0 through B8 respectively, and pin 16 is another COM terminal. A 24 VDC power source is connected to pins 1 and 16.</p>

Additional Information: For more details and specifications on any of these modules, refer to manual No. W393.



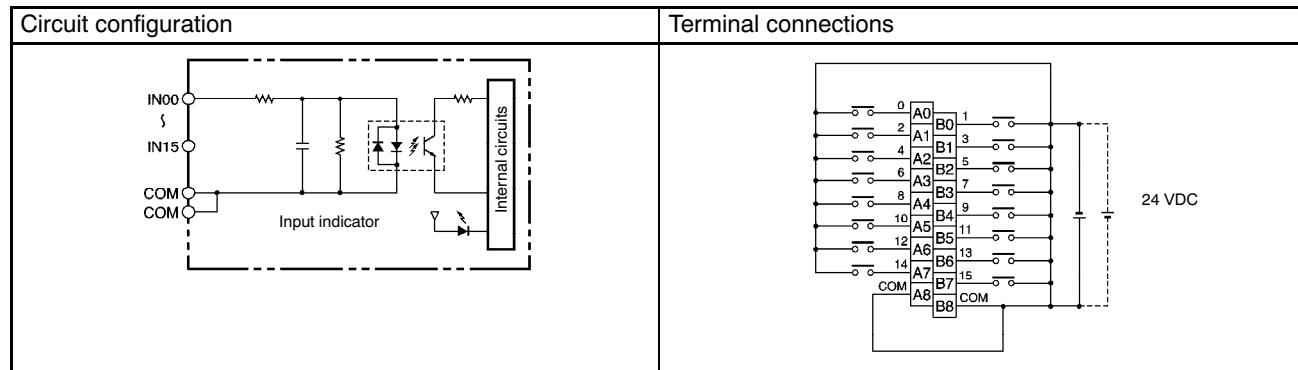
CJ1W-IDP01

■ Features

- With a high-speed Pulse-Catch Module, pulse inputs shorter than the cycle time of the CPU can be read.
- Input data in the internal circuits is cleared during the input refresh period.

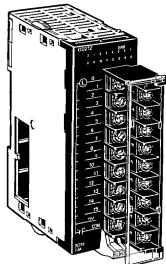
■ Specifications

Module	Model	Input voltage	Inputs	Input signal pulse width	No. of mountable modules	Mounting location	External connections
Pulse Catch Input Module	CJ1W-IDP01	24 VDC	16 inputs	ON: 0.01 ms min. OFF: 0.5 ms min.	No limit	Any location on CPU Rack or Expansion Rack	Removable terminal block

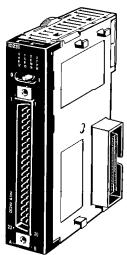


Additional Information: For more details and specifications on any of these modules, refer to manual No. W393.

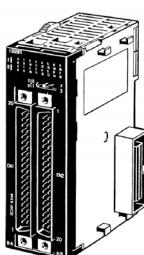
Output Modules



Output Modules
(8/16 points)
CJ1W-OD20
CJ1W-OD21
CJ1W-OC2
CJ1W-OA201



Output Modules
(32 points)
CJ1W-OD23



Output Modules
(64 points)
CJ1W-OD26

■ Relay Contact Output Modules

Classification	Outputs	Maximum switching capacity	Connections	Model
Basic I/O Module	8 pts (independent contacts)	2 A, 250 VAC/24 VDC	Removable terminal block	CJ1W-OC201
	16 pts			CJ1W-OC211

■ Transistor Output Modules

Classification	Outputs	Maximum switching capacity	Connections	Model
Basic I/O Module	8 pts	12 to 24 VDC, 2 A/pt, 8 A/module, sinking	Removable terminal block	CJ1W-OD201
		24 VDC, 2 A/pt, 8 A/module, sourcing, load short protection, disconnection detection, alarm		CJ1W-OD202
		12 to 24 VDC, 0.5 A/pt, 4 A/module, sinking		CJ1W-OD203
		24 VDC, 0.5 A/pt, 4 A/module, sourcing		CJ1W-OD204
	16 pts	12 to 24 VDC, 0.5 A/pt, 5 A/module, sinking	Removable terminal block	CJ1W-OD211
		24 VDC, 0.5 A/pt, 5 A/module, sourcing, load short protection, alarm		CJ1W-OD212
	32 pts	12 to 24 VDC, 0.5 A/pt, 4 A/module, sinking	Fujitsu-compatible connector	CJ1W-OD231
		24 VDC, 0.5 A/pt, 4 A/module, sourcing, load short protection, alarm	MIL connector	CJ1W-OD232
		12 to 24 VDC, 0.5 A/pt, 4 A/module, sinking		CJ1W-OD233
	64 pts	12 to 24 VDC, 0.3 A/pt, 6.4 A/module, sinking	Fujitsu-compatible connector	CJ1W-OD261
		12 to 24 VDC, 0.3 A/pt, 6.4 A/module, sinking	MIL connector	CJ1W-OD262
		12 to 24 VDC, 0.3 A/pt, 6.4 A/module, sinking		CJ1W-OD263

■ Triac Output Modules

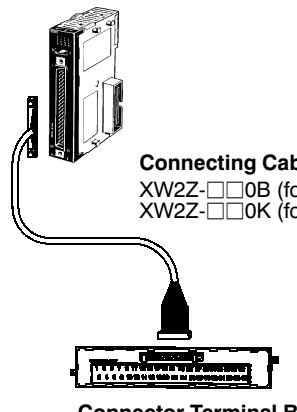
Classification	Outputs	Maximum switching capacity	Connections	Model
Basic I/O Module	8 pts	250 VAC, 0.6 A, 50/60 Hz	Removable terminal block	CJ1W-OA201

Additional Information: For more details and specifications on any of these modules, refer to manual No. W393.

■ Wiring and Cabling Examples

32-Point Output Modules

CJ1W-OD23□

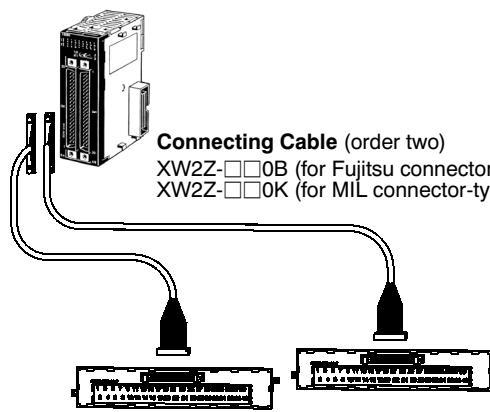


Connecting Cable

XW2Z-□□OB (for Fujitsu connector-type Modules)
XW2Z-□□OK (for MIL connector-type Modules)

64-Point Output Modules

CJ1W-OD26□

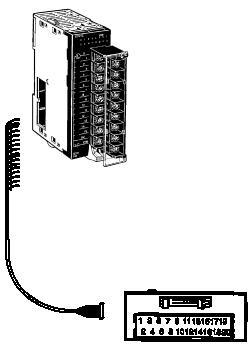


Connecting Cable (order two)

XW2Z-□□OB (for Fujitsu connector-type Modules)
XW2Z-□□OK (for MIL connector-type Modules)

8-Point and 16-Point Output Modules (Optional)

CJ1W-OD20□ and CJ1W-OD21□, CJ1W-OA201, CJ1W-OC2□1



Note: Since the 8- and 16-point I/O Modules have integrated screw terminals, this wiring configuration is necessary only if you are connecting to Omron XW2B Terminal Blocks.

Connector Terminal Blocks

XW2B-20G4
XW2B-20G5

Connecting Cable

XW2Z-□□OF
(cable terminated with crimp hooks)

(Wiring and Cabling Examples continue on the next page.)

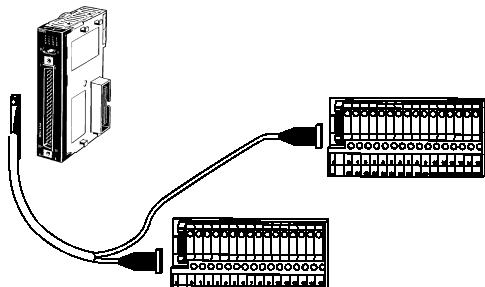
Additional Information: For more details and specifications on cables and terminal blocks, refer to Manual No. W393 or check the Wiring Solutions section of this catalog for more options.

Output Modules

Wiring and Cabling Examples for Relay Outputs

32-Point Output Modules

CJ1W-OD23□



Relay Terminal Block

(Order two)

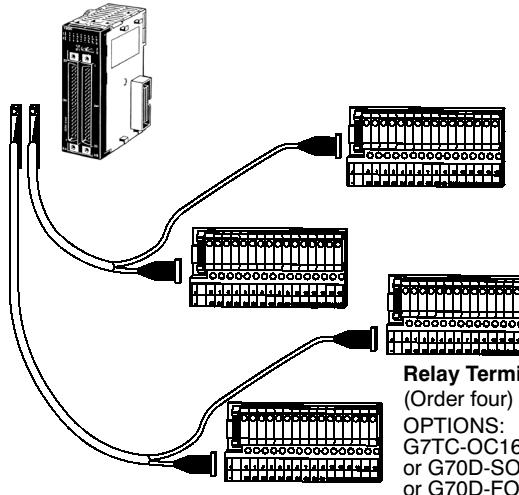
OPTIONS:
G7TC-OC16
or G70D-SOC16
or G70D-FOM16
or G70D-VSOC16
or G70D-VFOM16

Connecting Cable

G79-O□C-□ (for Fujitsu connector-type Modules)
G79-O□C-□-D1 (for MIL connector-type Modules)

64-Point Output Modules

CJ1W-OD26□



Relay Terminal Block

(Order four)

OPTIONS:
G7TC-OC16
or G70D-SOC16
or G70D-FOM16
or G70D-VSOC16
or G70D-VFOM16

Connecting Cable

G79-O□C-□ (for Fujitsu connector-type Modules)
G79-O□C-□-D1 (for MIL connector-type Modules)

■ Relay Output Module Circuit Configuration and Terminal Arrangement

CJ1W-OC201

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows a relay output module with internal circuits. It has two output terminals, OUT and OUTc, and an output indicator. The OUT terminal is connected to one side of a normally open contact in series with the coil of a relay. The other side of the contact is connected to the OUTc terminal. The coil of the relay is also connected to ground.</p>	<p>The terminal arrangement diagram shows a 2x8 matrix of terminals. The top row is labeled A0 through A7, and the bottom row is labeled B0 through B7. Each pair of terminals (A0/A1, A2/A3, A4/A5, A6/A7, B0/B1, B2/B3, B4/B5, B6/B7) is connected to a common terminal labeled NC (No Connection). Below the matrix, it specifies: 2 A, 250 VAC and 2 A, 24 VDC max.</p>

CJ1W-OC211

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows a relay output module with internal circuits. It has 16 output terminals labeled OUT00 through OUT15, and a common terminal labeled COM. The OUT terminals are connected to a common COM terminal via a normally open contact in series with the coil of a relay. The coil of the relay is connected to ground.</p>	<p>The terminal arrangement diagram shows a 2x8 matrix of terminals. The top row is labeled A0 through A15, and the bottom row is labeled B0 through B8. Each pair of terminals (A0/A1, A2/A3, A4/A5, A6/A7, A8/A9, A10/A11, A12/A13, A14/A15, B0/B1, B2/B3, B4/B5, B6/B7, B8/B9) is connected to a common terminal labeled COM. Below the matrix, it specifies: 2 A, 250 VAC and 2 A, 24 VDC max.</p>

■ Transistor Output Module Circuit Configuration and Terminal Arrangement

CJ1W-OD201

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>The circuit diagram shows four output channels. Each channel consists of a driver stage (NPN transistor) connected between the supply rail (+V) and the output terminal. The collector of each driver is connected to a common COM terminal. The bases of the drivers are controlled by logic signals from a central driver stage. A 24 VDC power source is connected to the +V rail. An output indicator is also present.</p>	

CJ1W-OD202

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>The circuit diagram shows four output channels. Each channel consists of a driver stage (NPN transistor) connected between the supply rail (+V) and the output terminal. The collector of each driver is connected to a common COM terminal. The bases of the drivers are controlled by logic signals from a central driver stage. A 24 VDC power source is connected to the +V rail. Short-circuit protection is included in the output paths.</p>	

Output Modules

Transistor Output Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-OD203

Circuit configuration	Terminal arrangement																																								
<p>Internal circuits</p> <p>Output indicator</p> <p>Short-circuit protection</p> <p>OUT00 to OUT07</p> <p>COM</p>	<table border="1"> <tr><td>0</td><td>A0</td><td>B0</td><td>1</td></tr> <tr><td>2</td><td>A1</td><td>B1</td><td>3</td></tr> <tr><td>4</td><td>A2</td><td>B2</td><td>5</td></tr> <tr><td>6</td><td>A3</td><td>B3</td><td>7</td></tr> <tr><td>NC</td><td>A4</td><td>B4</td><td>NC</td></tr> <tr><td>NC</td><td>A5</td><td>B5</td><td>NC</td></tr> <tr><td>NC</td><td>A6</td><td>B6</td><td>NC</td></tr> <tr><td>NC</td><td>A7</td><td>B7</td><td>NC</td></tr> <tr><td>12 to 24 V DC</td><td>COM</td><td>+V</td><td></td></tr> <tr><td></td><td>A8</td><td>B8</td><td></td></tr> </table>	0	A0	B0	1	2	A1	B1	3	4	A2	B2	5	6	A3	B3	7	NC	A4	B4	NC	NC	A5	B5	NC	NC	A6	B6	NC	NC	A7	B7	NC	12 to 24 V DC	COM	+V			A8	B8	
0	A0	B0	1																																						
2	A1	B1	3																																						
4	A2	B2	5																																						
6	A3	B3	7																																						
NC	A4	B4	NC																																						
NC	A5	B5	NC																																						
NC	A6	B6	NC																																						
NC	A7	B7	NC																																						
12 to 24 V DC	COM	+V																																							
	A8	B8																																							

CJ1W-OD204

Circuit configuration	Terminal arrangement																																								
<p>Internal circuits</p> <p>Output indicator</p> <p>ERR indicator</p> <p>OUT00 to OUT07</p> <p>COM(+) 0V</p>	<table border="1"> <tr><td>0</td><td>A0</td><td>B0</td><td>1</td></tr> <tr><td>2</td><td>A1</td><td>B1</td><td>3</td></tr> <tr><td>4</td><td>A2</td><td>B2</td><td>5</td></tr> <tr><td>6</td><td>A3</td><td>B3</td><td>7</td></tr> <tr><td>NC</td><td>A4</td><td>B4</td><td>NC</td></tr> <tr><td>NC</td><td>A5</td><td>B5</td><td>NC</td></tr> <tr><td>NC</td><td>A6</td><td>B6</td><td>NC</td></tr> <tr><td>NC</td><td>A7</td><td>B7</td><td>NC</td></tr> <tr><td>0V</td><td>0V</td><td>COM(+V)</td><td>24 V DC</td></tr> <tr><td></td><td>A8</td><td>B8</td><td></td></tr> </table>	0	A0	B0	1	2	A1	B1	3	4	A2	B2	5	6	A3	B3	7	NC	A4	B4	NC	NC	A5	B5	NC	NC	A6	B6	NC	NC	A7	B7	NC	0V	0V	COM(+V)	24 V DC		A8	B8	
0	A0	B0	1																																						
2	A1	B1	3																																						
4	A2	B2	5																																						
6	A3	B3	7																																						
NC	A4	B4	NC																																						
NC	A5	B5	NC																																						
NC	A6	B6	NC																																						
NC	A7	B7	NC																																						
0V	0V	COM(+V)	24 V DC																																						
	A8	B8																																							

CJ1W-OD211

Circuit configuration	Terminal arrangement																																								
<p>Internal circuits</p> <p>Output indicator</p> <p>OUT00</p> <p>OUT15</p> <p>COM</p>	<table border="1"> <tr><td>0</td><td>A0</td><td>B0</td><td>1</td></tr> <tr><td>2</td><td>A1</td><td>B1</td><td>3</td></tr> <tr><td>4</td><td>A2</td><td>B2</td><td>5</td></tr> <tr><td>6</td><td>A3</td><td>B3</td><td>7</td></tr> <tr><td>8</td><td>A4</td><td>B4</td><td>9</td></tr> <tr><td>10</td><td>A5</td><td>B5</td><td>11</td></tr> <tr><td>12</td><td>A6</td><td>B6</td><td>13</td></tr> <tr><td>14</td><td>A7</td><td>B7</td><td>15</td></tr> <tr><td>12 to 24 VDC</td><td>COM</td><td>+V</td><td></td></tr> <tr><td></td><td>A8</td><td>B8</td><td></td></tr> </table>	0	A0	B0	1	2	A1	B1	3	4	A2	B2	5	6	A3	B3	7	8	A4	B4	9	10	A5	B5	11	12	A6	B6	13	14	A7	B7	15	12 to 24 VDC	COM	+V			A8	B8	
0	A0	B0	1																																						
2	A1	B1	3																																						
4	A2	B2	5																																						
6	A3	B3	7																																						
8	A4	B4	9																																						
10	A5	B5	11																																						
12	A6	B6	13																																						
14	A7	B7	15																																						
12 to 24 VDC	COM	+V																																							
	A8	B8																																							

Transistor Output Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-OD212

Circuit configuration	Terminal arrangement																																																												
<p>Internal circuits</p> <p>Output indicator SW</p> <p>ERR indicator</p> <p>Short-circuit protection</p> <p>OUT00, OUT15, 0V, COM0 (+V)</p>	<table border="1"> <tr><td>L</td><td>0</td><td>A0</td><td>B0</td><td>1</td><td>L</td></tr> <tr><td>L</td><td>2</td><td>A1</td><td>B1</td><td>3</td><td>L</td></tr> <tr><td>L</td><td>4</td><td>A2</td><td>B2</td><td>5</td><td>L</td></tr> <tr><td>L</td><td>6</td><td>A3</td><td>B3</td><td>7</td><td>L</td></tr> <tr><td>L</td><td>8</td><td>A4</td><td>B4</td><td>9</td><td>L</td></tr> <tr><td>L</td><td>10</td><td>A5</td><td>B5</td><td>11</td><td>L</td></tr> <tr><td>L</td><td>12</td><td>A6</td><td>B6</td><td>13</td><td>L</td></tr> <tr><td>L</td><td>14</td><td>A7</td><td>B7</td><td>15</td><td>L</td></tr> <tr><td>0V</td><td>0V</td><td>A8</td><td>B8</td><td>COM</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>+V</td><td>24 VDC</td></tr> </table>	L	0	A0	B0	1	L	L	2	A1	B1	3	L	L	4	A2	B2	5	L	L	6	A3	B3	7	L	L	8	A4	B4	9	L	L	10	A5	B5	11	L	L	12	A6	B6	13	L	L	14	A7	B7	15	L	0V	0V	A8	B8	COM						+V	24 VDC
L	0	A0	B0	1	L																																																								
L	2	A1	B1	3	L																																																								
L	4	A2	B2	5	L																																																								
L	6	A3	B3	7	L																																																								
L	8	A4	B4	9	L																																																								
L	10	A5	B5	11	L																																																								
L	12	A6	B6	13	L																																																								
L	14	A7	B7	15	L																																																								
0V	0V	A8	B8	COM																																																									
				+V	24 VDC																																																								

CJ1W-OD231

Circuit configuration	Terminal arrangement																																																																																								
<p>Internal circuits</p> <p>Output indicator SW</p> <p>OUT00, OUT15, 0V, COM0, COM1</p> <p>Word m</p> <p>Word m+1</p>	<p>12 to 24 VDC</p> <p>Word m</p> <table border="1"> <tr><td>A</td><td>B</td><td>0</td><td>L</td></tr> <tr><td>1</td><td>1</td><td>1</td><td>L</td></tr> <tr><td>2</td><td>2</td><td>2</td><td>L</td></tr> <tr><td>3</td><td>3</td><td>3</td><td>L</td></tr> <tr><td>4</td><td>4</td><td>4</td><td>L</td></tr> <tr><td>5</td><td>5</td><td>5</td><td>L</td></tr> <tr><td>6</td><td>6</td><td>6</td><td>L</td></tr> <tr><td>7</td><td>7</td><td>7</td><td>L</td></tr> <tr><td>8</td><td>8</td><td>8</td><td>L</td></tr> <tr><td>COM0</td><td>9</td><td>9</td><td>COM1</td></tr> <tr><td>+V</td><td>10</td><td>10</td><td>+V</td></tr> </table> <p>Word m+1</p> <table border="1"> <tr><td>A</td><td>B</td><td>0</td><td>L</td></tr> <tr><td>11</td><td>11</td><td>8</td><td>L</td></tr> <tr><td>12</td><td>12</td><td>9</td><td>L</td></tr> <tr><td>13</td><td>13</td><td>10</td><td>L</td></tr> <tr><td>14</td><td>14</td><td>11</td><td>L</td></tr> <tr><td>15</td><td>15</td><td>12</td><td>L</td></tr> <tr><td>16</td><td>16</td><td>13</td><td>L</td></tr> <tr><td>17</td><td>17</td><td>14</td><td>L</td></tr> <tr><td>18</td><td>18</td><td>15</td><td>L</td></tr> <tr><td>COM0</td><td>19</td><td>19</td><td>COM1</td></tr> <tr><td>+V</td><td>20</td><td>20</td><td>+V</td></tr> </table> <p>12 to 24 VDC</p>	A	B	0	L	1	1	1	L	2	2	2	L	3	3	3	L	4	4	4	L	5	5	5	L	6	6	6	L	7	7	7	L	8	8	8	L	COM0	9	9	COM1	+V	10	10	+V	A	B	0	L	11	11	8	L	12	12	9	L	13	13	10	L	14	14	11	L	15	15	12	L	16	16	13	L	17	17	14	L	18	18	15	L	COM0	19	19	COM1	+V	20	20	+V
A	B	0	L																																																																																						
1	1	1	L																																																																																						
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8	8	8	L																																																																																						
COM0	9	9	COM1																																																																																						
+V	10	10	+V																																																																																						
A	B	0	L																																																																																						
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15	15	12	L																																																																																						
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17	17	14	L																																																																																						
18	18	15	L																																																																																						
COM0	19	19	COM1																																																																																						
+V	20	20	+V																																																																																						

Output Modules

Transistor Output Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-OD232

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>Word m</p> <p>Word m+1</p> <p>Output indicator</p> <p>ERR indicator</p>	<p>Word m+1</p> <p>Word m</p>

CJ1W-OD233

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>Word m</p> <p>Word m+1</p> <p>Output indicator</p> <p>ERR indicator</p>	<p>Word m+1</p> <p>Word m</p>

Transistor Output Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-OD261

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>Output indicator</p> <p>SW</p> <p>Word m</p> <p>Word m+1</p> <p>Word m+2</p> <p>CN1</p> <p>CN2</p>	<p>Word m+1</p> <p>Word m</p> <p>Word m+2</p> <p>Word m+3</p> <p>CN1</p> <p>CN2</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p>

CJ1W-OD262

Circuit configuration	Terminal arrangement
<p>Internal circuits</p> <p>Output indicator</p> <p>Indicator switch</p> <p>I/O word m</p> <p>I/O word m+1</p> <p>I/O word m+2</p> <p>I/O word m+3</p> <p>CN1 (OUT)</p> <p>CN2 (OUT)</p>	<p>CN1 (OUT)</p> <p>CN2 (OUT)</p> <p>I/O word m+1</p> <p>I/O word m+2</p> <p>I/O word m+3</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p> <p>12 to 24 VDC</p>

Output Modules

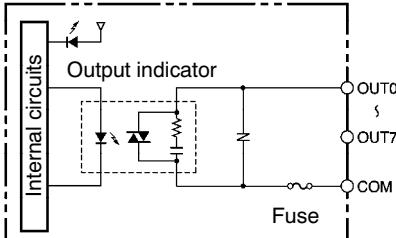
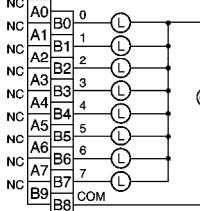
Transistor Output Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-OD263

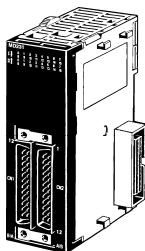
Circuit configuration	Terminal arrangement																																																																																																																																																																																																																																																																																																														
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■ Triac Output Module Circuit Configuration and Terminal Arrangement

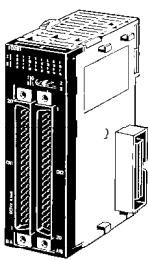
CJ1W-OA201

Circuit configuration	Terminal arrangement
	 <p>250 VAC max.</p>

Mixed I/O Modules



I/O Units (32 points)
CJ1W-MD23□



I/O Units (64 points)
CJ1W-MD26□
CJ1W-MD563

■ DC Input/Transistor Output Units

Classification	Inputs/ Outputs	Input voltage	Input current (typical)	Max. output switching capacity	Connections	Model
Basic I/O Unit	16 inputs/ 16 outputs	24 VDC	7 mA	12 to 24 VDC, 0.5 A/pt, 2.0 A/Unit, sinking outputs	Fujitsu-compatible connector	CJ1W-MD231
			24 VDC, 0.5 A/pt, 2.0 A/Unit, sourcing	MIL connector	CJ1W-MD232	
			12 to 24 VDC, 0.5 A/pt, 2.0 A/Unit, sinking outputs	MIL connector	CJ1W-MD233	
	32 inputs/ 32 outputs	4.1 mA		12 to 24 VDC, 0.3 A/pt, 3.2 A/Unit, sinking outputs	Fujitsu-compatible connector	CJ1W-MD261
					MIL connector	CJ1W-MD263

■ TTL I/O Units

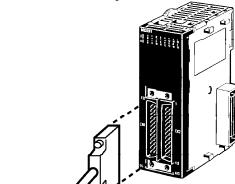
Classification	Inputs/ Outputs	Input voltage	Input current (typical)	Max. output switching capacity	Connections	Model
Basic I/O Unit	32 inputs/ 32 outputs	5 VDC	3.5 mA	5 VDC, 35 mA/pt, 1.12 A/Unit	MIL connector	CJ1W-MD563

■ Wiring and Cabling Examples

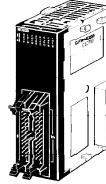
32-Point Mixed I/O Modules

CJ1W-MD231 (Fujitsu connector, I/O Unit)
 CJ1W-MD232 (MIL connector, I/O Unit)
 CJ1W-MD233 (MIL connector, I/O Unit)

Unit with Fujitsu Connector



Unit with MIL Connector


Connecting Cable

XW2Z-□□□A (for Fujitsu connector)
 G79-O□□C (for MIL connector)

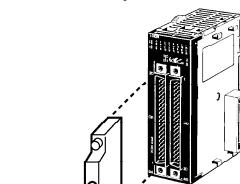
Connector Terminal Blocks

XW2B-20G4
 XW2B-20G5
 XW2D-20G6
 XW2C-20G5-IN16 (inputs only)
 XW2E-20G5-IN16 (inputs only)

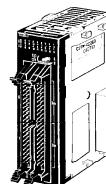
64-Point Mixed I/O Modules

CJ1W-MD261 (Fujitsu connector I/O Unit)
 CJ1W-MD263 (MIL connector, I/O Unit)
 CJ1W-MD563 (MIL connector, I/O Unit)

Unit with Fujitsu Connector



Unit with MIL Connector


Connecting Cable (2 sets)

XW2Z-□□□OB (for Fujitsu connector)
 XW2Z-□□□OK (for MIL connector)

Connector Terminal Blocks

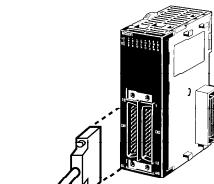
XW2B-40G4
 XW2B-40G5
 XW2D-40G6

Additional Information: For more details and specifications on cables and terminal blocks, refer to Manual No. W393 or check the Wiring Solutions section of this catalog for more options.

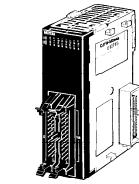
32-Point Mixed I/O Modules

CJ1W-MD231 (Fujitsu connector, I/O Unit)
 CJ1W-MD232 (MIL connector, I/O Unit)
 CJ1W-MD233 (MIL connector, I/O Unit)

Unit with Fujitsu Connector



Unit with MIL Connector


Connecting Cable

G79-□C (for Fujitsu connector)
 G79-O□□C (for MIL connector)

Relay Terminal

G7TC-ID16
 G7TC-IA16
 G7TC-OC16
 G70D-VSOC16
 G70D-VFOM16
 G70A-ZOC16-3 and Relays

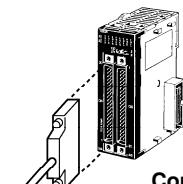
} Input Relay Terminals

} Output Relay Terminals

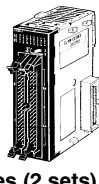
64-Point Mixed I/O Modules

CJ1W-MD261 (Fujitsu connector, I/O Unit)
 CJ1W-MD263 (MIL connector, I/O Unit)

Unit with Fujitsu Connector



Unit with MIL Connector


Connecting Cables (2 sets)

G79-I□C-□ (for Fujitsu connector Input Units)
 G79-O□C-□ (for Fujitsu connector Output Units)
 G79-I□C-□-D1 (MIL connector/Input Unit)
 G79-O□C-□-D1 (MIL connector/Output Unit)

Relay Terminal

G7TC-ID16
 G7TC-IA16
 G7TC-OC16
 G70D-VSOC16
 G70D-VFOM16
 G70A-ZOC16-3 and Relays

} Input Relay Terminals

} Output Relay Terminals

Mixed I/O Modules

■ Mixed I/O Module Circuit Configuration and Terminal Arrangement

CJ1W-MD231

Circuit configuration	Terminal arrangement
<p>The circuit diagram illustrates the internal logic for the CJ1W-MD231 module. It shows two sets of output drivers (A and B) connected to external terminals. Each driver consists of a driver stage followed by a buffer stage. The outputs are labeled OUT00, OUT07, OUT08, OUT15, and COM. The inputs are labeled IN00, IN07, IN08, IN15, and COM. Input indicators are shown for IN00, IN07, IN08, and IN15. The module also includes a power supply section and a ground connection.</p>	<p>CN1 (OUT) Word m B A NC 12 12 NC NC 11 11 NC +V 10 10 +V COM (OV) 9 9 COM (OV) 12 to 24 VDC 15 8 7 6 5 4 3 2 1 0 1 1 12 to 24 VDC</p> <p>CN2 (IN) Word m+1 A B 0 1 1 8 2 2 9 3 3 10 4 4 11 5 5 12 6 6 13 7 7 14 8 8 15 9 9 COM 24 VDC 10 10 NC 11 11 NC 12 12 NC</p>

CJ1W-MD232

Circuit configuration	Terminal arrangement
<p>The circuit diagram for the CJ1W-MD232 module shows a similar internal structure to the CJ1W-MD231. It features two sets of output drivers (A and B) and two sets of input buffers (A and B). The outputs are labeled OUT00 to OUT15 and COM. The inputs are labeled IN00 to IN15 and COM. The module includes input indicators for IN00, IN07, IN08, and IN15, as well as short-circuit protection and an error indicator (ERR).</p>	<p>CN1 (Outputs) I/O word "m" 24 V DC 00 19 08 18 17 09 16 15 10 14 13 12 11 07 06 05 04 03 02 01 COM (+V) 0V</p> <p>CN2 (Inputs) I/O word "m+1" 24 V DC 1 2 NC 3 4 COM 5 6 07 06 05 04 03 02 01 15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 19 20 COM (+V) 0V</p>

Mixed I/O Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-MD233

Circuit configuration	Terminal arrangement
<p>The circuit diagram illustrates the internal logic for the CJ1W-MD233 module. It features two sets of output drivers (labeled A and B) for outputs OUT00 to OUT15. Each driver consists of a driver stage followed by an inverter and a switch. The outputs are connected to +V, COM, and ground. Inputs IN00 to IN15 are connected through resistors (3.3 kΩ) and capacitors (1,000 pF) to ground. Input indicators are also shown. The module uses 12 to 24 VDC power supply.</p>	<p>The terminal arrangement shows the pinout for the CJ1W-MD233. CN1 (OUT) has 16 pins labeled 0 to 15, with COM (0V) at pin 16. CN2 (IN) has 20 pins labeled 1 to 20, with COM (0V) at pin 20. Power supply terminals +V and 12 to 24 VDC are also present.</p>

CJ1W-MD261

Circuit configuration	Terminal arrangement
<p>The circuit diagram for the CJ1W-MD261 includes indicator switches (labeled A and B) connected in parallel with the output drivers. The module uses two sets of output drivers (A and B) for outputs OUT00 to OUT15. Inputs IN00 to IN15 are connected through resistors (5.6 kΩ) and capacitors (1,000 pF) to ground. Input indicators are also shown. The module uses 12 to 24 VDC power supply.</p>	<p>The terminal arrangement for the CJ1W-MD261 shows four word pinouts: Word m+1 (pins 19, 19, 20, 20), Word m (pins 0, 1, 2, 3), Word m+2 (pins 4, 5, 6, 7), and Word m+3 (pins 8, 9, 10, 11). Power supply terminals +V and 24 VDC are also present.</p>

Mixed I/O Modules

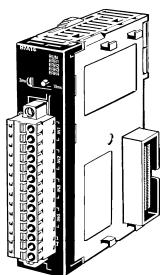
Mixed I/O Module Circuit Configuration and Terminal Arrangement (continued)

CJ1W-MD263

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows the internal logic for the CJ1W-MD263 module. It features two sets of output drivers for OUT00 to OUT15, each with an indicator switch. The module also includes two sets of input amplifiers for IN00 to IN15, each with an indicator switch. Internal resistors (5.6 kΩ, 1.000 pF, 560 Ω) and capacitors (1.000 pF) are used in the input paths.</p>	<p>The terminal arrangement for the CJ1W-MD263 is as follows:</p> <ul style="list-style-type: none"> CN1 (OUT): 12 to 24 VDC. Pin 1: +V, Pin 2: COM0, Pin 3: OUT00, Pin 4: OUT15, Pin 5: COM0, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM0, Pin 9: COM0, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM0, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM0, Pin 16: COM0, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM0, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM0, Pin 23: +V. CN2 (IN): 24 VDC. Pin 1: NC, Pin 2: COM3, Pin 3: 1, Pin 4: 2, Pin 5: 3, Pin 6: 4, Pin 7: 5, Pin 8: 6, Pin 9: 7, Pin 10: 8, Pin 11: 9, Pin 12: 10, Pin 13: 11, Pin 14: 12, Pin 15: 13, Pin 16: 14, Pin 17: 15, Pin 18: 16, Pin 19: 17, Pin 20: 18, Pin 21: NC, Pin 22: COM2, Pin 23: 21, Pin 24: 22, Pin 25: 23, Pin 26: 24, Pin 27: 25, Pin 28: 26, Pin 29: 27, Pin 30: 28, Pin 31: 29, Pin 32: 30, Pin 33: 31, Pin 34: 32, Pin 35: 33, Pin 36: 34, Pin 37: 35, Pin 38: 36, Pin 39: 37, Pin 40: 38. Word m: Pin 1: +V, Pin 2: COM0, Pin 3: OUT00, Pin 4: OUT15, Pin 5: COM0, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM0, Pin 9: COM0, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM0, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM0, Pin 16: COM0, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM0, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM0, Pin 23: +V. Word m+1: Pin 1: +V, Pin 2: COM1, Pin 3: OUT00, Pin 4: OUT15, Pin 5: COM1, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM1, Pin 9: COM1, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM1, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM1, Pin 16: COM1, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM1, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM1, Pin 23: +V.

CJ1W-MD563

Circuit configuration	Terminal arrangement
<p>The circuit diagram shows the internal logic for the CJ1W-MD563 module. It features two sets of output drivers for OUT00 to OUT15, each with an indicator switch. The module also includes two sets of input amplifiers for IN00 to IN15, each with an indicator switch. Internal resistors (5.6 kΩ, 1.1 kΩ, 2.2 kΩ, 1.000 pF) and capacitors (1.000 pF) are used in the input paths.</p>	<p>The terminal arrangement for the CJ1W-MD563 is as follows:</p> <ul style="list-style-type: none"> CN1 (OUT): 5 VDC. Pin 1: +V, Pin 2: COM0, Pin 3: OUT00, Pin 4: OUT15, Pin 5: 5 VDC, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM0, Pin 9: COM0, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM0, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM0, Pin 16: COM0, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM0, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM0, Pin 23: +V. CN2 (IN): 5 VDC. Pin 1: NC, Pin 2: COM3, Pin 3: 1, Pin 4: 2, Pin 5: 3, Pin 6: 4, Pin 7: 5, Pin 8: 6, Pin 9: 7, Pin 10: 8, Pin 11: 9, Pin 12: 10, Pin 13: 11, Pin 14: 12, Pin 15: 13, Pin 16: 14, Pin 17: 15, Pin 18: 16, Pin 19: 17, Pin 20: 18, Pin 21: NC, Pin 22: COM2, Pin 23: 21, Pin 24: 22, Pin 25: 23, Pin 26: 24, Pin 27: 25, Pin 28: 26, Pin 29: 27, Pin 30: 28, Pin 31: 29, Pin 32: 30, Pin 33: 31, Pin 34: 32, Pin 35: 33, Pin 36: 34, Pin 37: 35, Pin 38: 36, Pin 39: 37, Pin 40: 38. Word m: Pin 1: +V, Pin 2: COM0, Pin 3: OUT00, Pin 4: OUT15, Pin 5: 5 VDC, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM0, Pin 9: COM0, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM0, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM0, Pin 16: COM0, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM0, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM0, Pin 23: +V. Word m+1: Pin 1: +V, Pin 2: COM1, Pin 3: OUT00, Pin 4: OUT15, Pin 5: 5 VDC, Pin 6: OUT00, Pin 7: OUT15, Pin 8: COM1, Pin 9: COM1, Pin 10: OUT00, Pin 11: OUT15, Pin 12: COM1, Pin 13: OUT00, Pin 14: OUT15, Pin 15: COM1, Pin 16: COM1, Pin 17: OUT00, Pin 18: OUT15, Pin 19: COM1, Pin 20: OUT00, Pin 21: OUT15, Pin 22: COM1, Pin 23: +V.

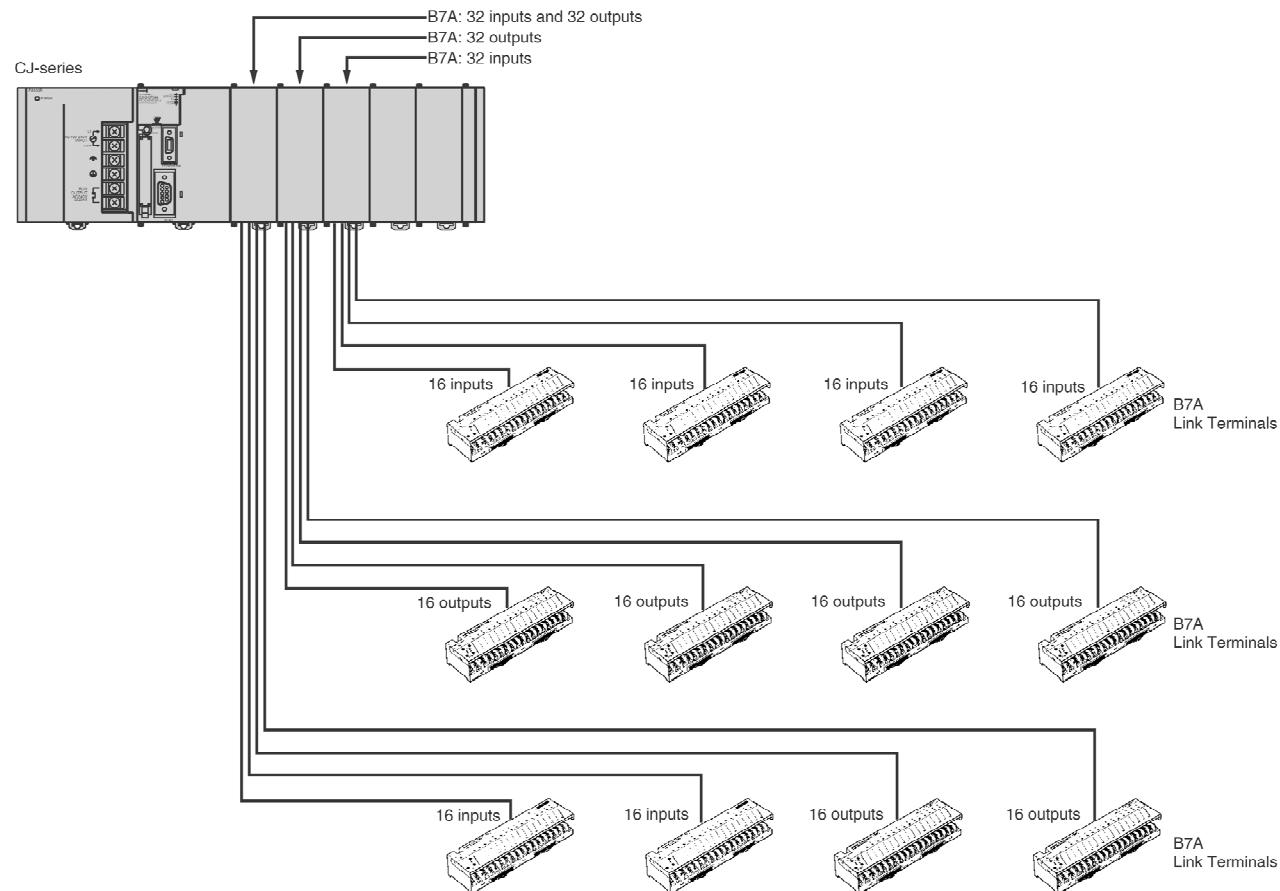


CJ1W-B7A22
CJ1W-B7A14
CJ1W-B7A04

■ Features

- Wire remote switches, lamps, and other devices without being concerned with communications while also reducing wiring both inside and outside the control panel.
- Handles up to 64 signals with each module.
- Communications possible for up to 500 m.
- No complicated settings or programming (operates as a Basic I/O Unit).

■ System Configuration



B7A Interface Modules

■ Specifications

Item		Specification		
		CJ1W-B7A22	CJ1W-B7A14	CJ1W-B7A04
Unit classification		Basic I/O Unit		
Inputs/Outputs		32 inputs/32 outputs	64 inputs	64 outputs
Transmission distance	High-speed operation	Same power supply for Unit and Link Terminals	With 0.75 mm ² or larger communications line Not shielded: 10 m max. Shielded: 50 m max.	
		Separate power supplies for Unit and Link Terminals	With 0.75 mm ² or larger communications line Not shielded: 10 m max. Shielded: 100 m max.	
	Normal operation	Same power supply for Unit and Link Terminals	With 0.75 mm ² or larger communications line: 100 m max.	
		Separate power supplies for Unit and Link Terminals	With 0.75 mm ² or larger communications line: 500 m max.	
Transmission delay		Normal operation: 19 ms (typical), High-speed operation: 3 ms (typical)		
Power supply voltage		12 to 24 VDC (allowable range: 10.8 to 26.4 VDC)		
I/O word allocations		Words are allocated according to the location the Unit is connected in the PLC. Four words (64 points) are allocated to each Unit.		

■ Applicable B7A Link Terminals

Input Terminals

Type	Model	Transmission Delay
Screw Terminals	B7A-T6□1	Normal (19.2 ms)
	B7AS-T6□1	
	B7A-T6□6	High Speed (3 ms)
	B7AS-T6□6	
Modules	B7A-T6D2	Normal (19.2 ms)
	B7A-T6D7	High Speed (3 ms)
PLC connectors	B7A-T□E3	Normal (19.2 ms)
	B7A-T□E8	High Speed (3 ms)

I/O Terminals and Input Terminal with 32 Inputs

Type	Model	Transmission Delay
Screw Terminals	B7AM-6BS	Normal (19.2 ms) or High Speed (3 ms)
	B7AS-RT3BS	

Output Terminals

Type	Model	Transmission Delay
Screw Terminals	B7A-R6□□1	Normal (19.2 ms)
	B7AS-R6□□1	
	B7A-R6□□6	High Speed (3 ms)
	B7AS-R6□□6	
Relay outputs	G70D-R6R□1-B7A	Normal (19.2 ms)
	G70D-R6M□1-B7A	High Speed (3 ms)
Modules	B7A-R6A52	Normal (19.2 ms)
	B7A-R6A57	High Speed (3 ms)
PLC connectors	B7A-R□A□3	Normal (19.2 ms)
	B7A-R□A□8	High Speed (3 ms)

Note 1. Use a B7A Link Terminal that has the same delay at the B7A Interface Unit.

2. B7A Link Terminal with 10 points cannot be connected.