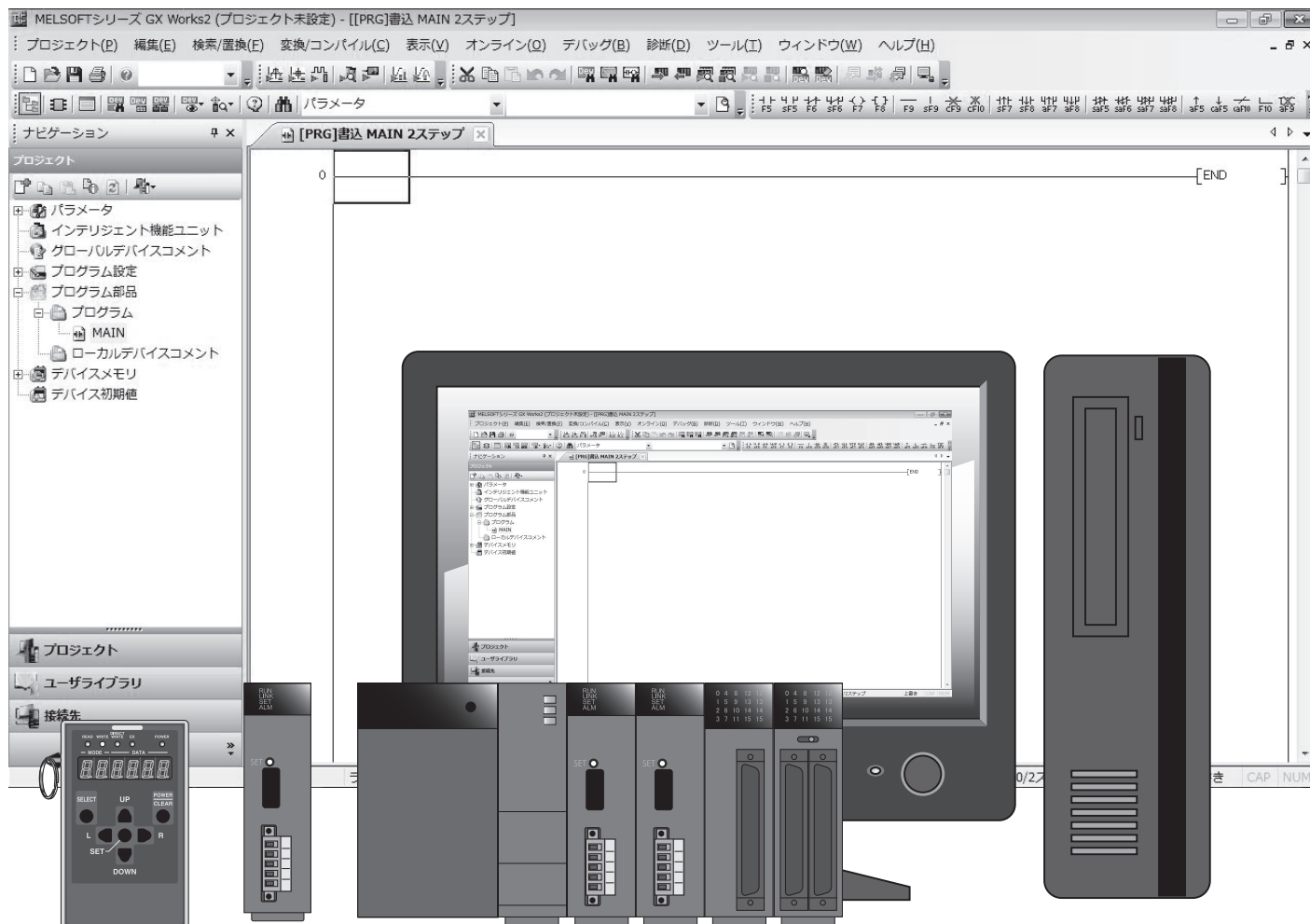


AnyWireASLINK

Startup Guide (Initial Setting)



Introduction

This document provides an easy-to-understand explanation of initial setting required to start the AnyWireASLINK system after the wiring.

- 1) AnyWire address setting
- 2) GX Works2 setting
- 3) I/O check using the GX Works2

- Notes on the use

For an in-depth description of engineering tools and CPU, refer to the user's manual for each product.

For an in-depth description of the AnyWireASLINK slave units, refer to respective product guides.

- Types of the master unit

This document describes examples of application for QJ51AW12AL.

If any master units other than QJ51AW12AL are used, check respective manuals and pay attention to the differences.

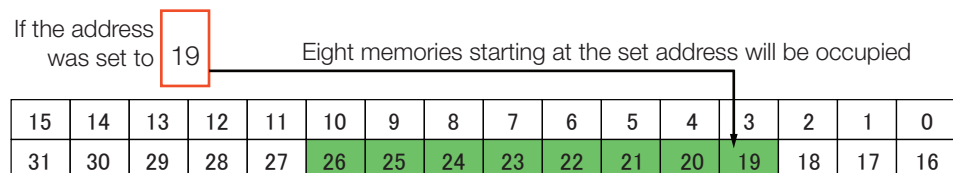
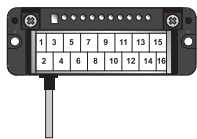
1) AnyWire address setting

■ What is an AnyWire address?

As the term implies, an “address” determines the start address in the memory used by a slave unit. It is defined by a decimal number.

Although the number of memories occupied by a slave unit varies depending on the unit used, the area including the set address and subsequent number of memories will be occupied.

[An example of BL296SB-08F-V50 (slave unit with eight inputs)]

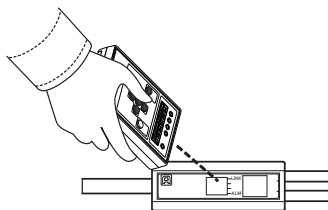


■ Rules for setting the address

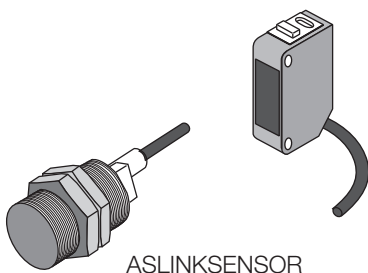
- ① Use a dedicated address writer (ARW-04) and perform the setting via the infrared data communication.



Address writer (ARW-04)

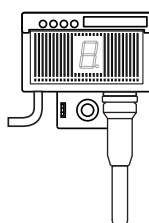


- ② Set addresses for **all** slave units to be used.



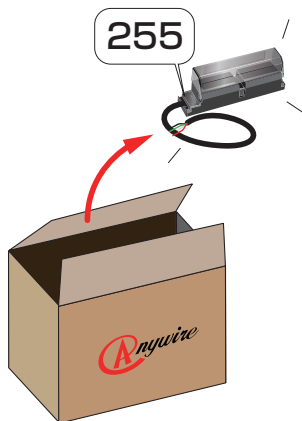
ASLINKSENSOR

ASLINKPOKAYOKE



ASLINKTERMINAL

- ③ The address numbers available for setting are from 0 through 254 for both input and output. It is also possible to set the address with a blank interval. The address number 255 cannot be used because it is a special number indicating the status of shipment.



Tips

- For an input/output mixing slave unit, only one address is set to indicate the starting address for the input and output memory area.
- It is also possible to set aside blank areas in anticipation of future system modification and addition of slave units.
- Since the master unit has an address non-setting detection function (address #255 is used to detect non-setting), failing to perform the address setting is not a problem.
- * For further information, refer to the manual of the master unit.

- ④ There should be no duplication of address being set or overlapping of memory area among the input slave units used, or among the output slave units used.

Input area	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48

NG

Address No. 44 in a 4-point input area

Address No. 44 in a 1-point input area

Duplicate address between input (output) units

OK

Address No. 0 in an 8-point input area

Duplicate address between input and output units

Address No. 0 in an 8-point output area

Output area	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48

OK

Address No. 44 in a 1-point output area

An address setting with a blank area in the occupied area

NG

Address No. 6 in an 8-point output area

Duplicated with the occupied area starting at address No. 0

■ Execution of automatic address identification

Upon completion of address setting for all slave units connected, perform the automatic address identification operation.

[What is the automatic address identification?]

It is an operation in which the master unit stores the configuration and addresses of connected slave units in the EEPROM. The detection of transmission line disconnection works only after this operation.

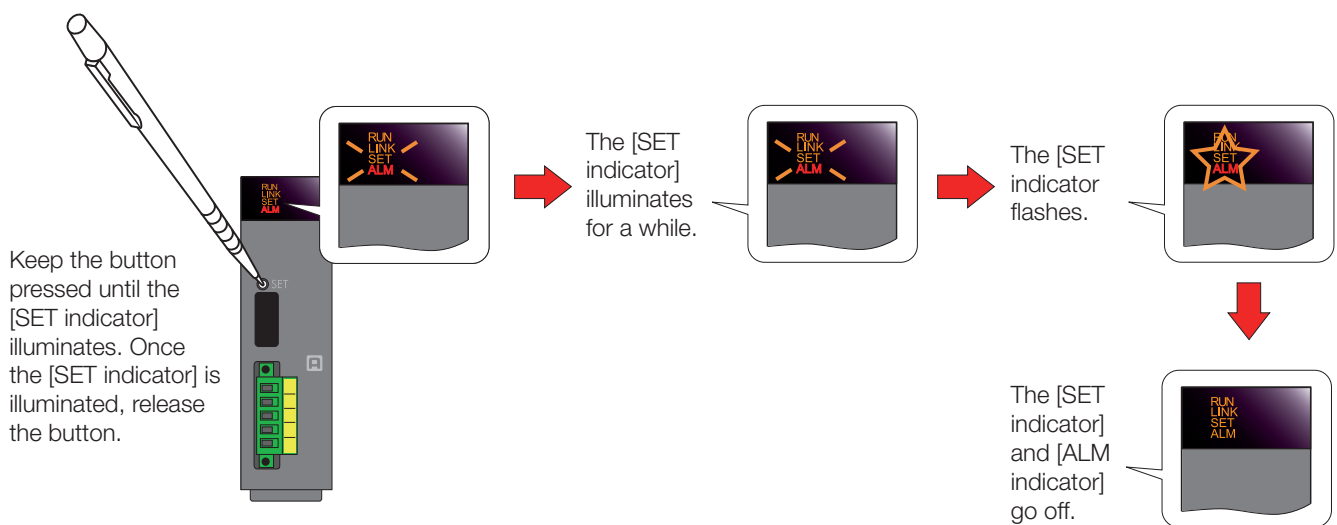
- At the system startup
- When the system has been modified

Always perform the operation on these occasions.

■ How to perform the automatic address identification operation

There are two ways to perform the automatic address identification operation.

① Keeping the SET button on the master unit pressed



② Using the Y-output from the sequencer side

For further information, refer to the manual of the master unit.
The LED functions in the same manner as in [1] during the operation.

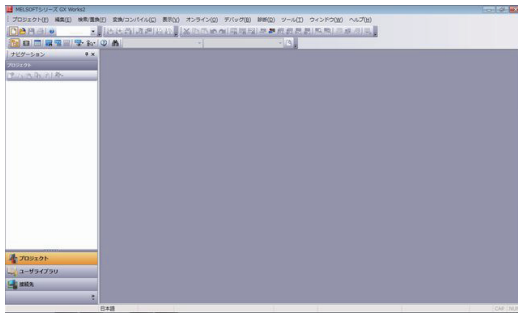
[Tips]

Before performing the automatic address identification operation, ensure that the LINK indicators on all slave units are flashing.

When the master unit is energized, the ALM indicator on the unit will be illuminated until the automatic address identification operation is performed.

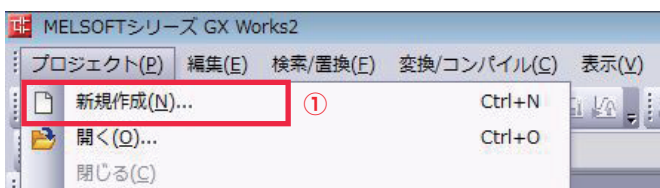
2) GX Works2 Setting

■ Start the GX Works2.



■ Create a new project.

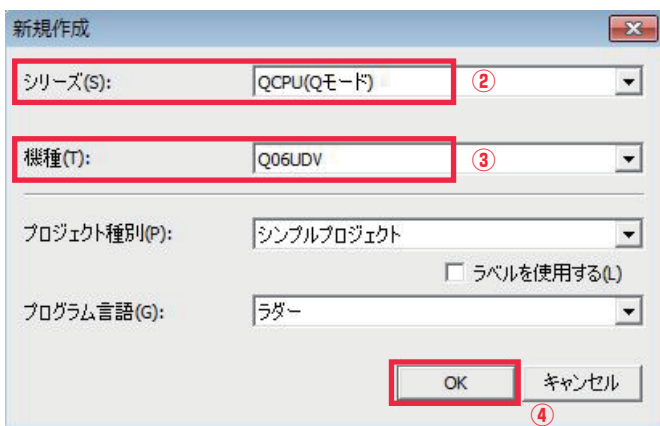
① Select Project and then New.



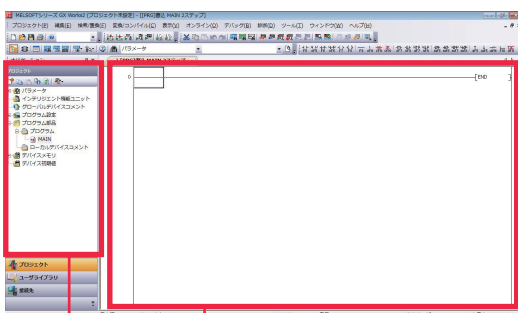
② Select Series. (Here, QCPU (Q mode) is selected.)

③ Select the Model. (Here, Q06UDV is selected.)

④ Click on the OK button.



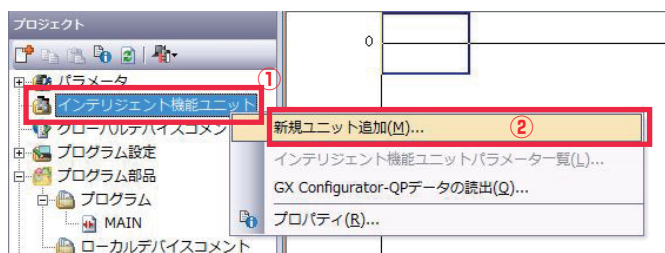
⑤ The project tree and the circuit window will appear. (The creation of a new project is complete.)



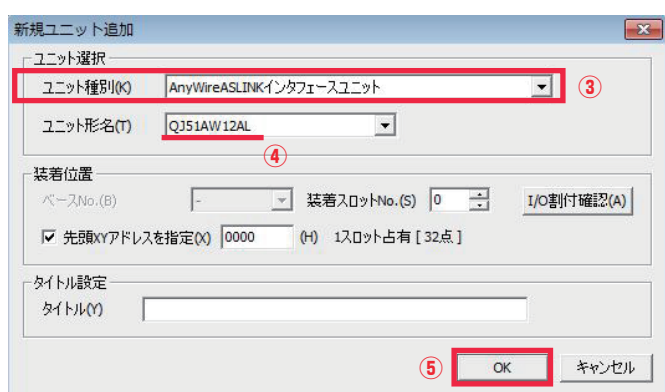
■ Addition of new intelligent function unit

Add the AnyWireASLINK master unit.

- ① Right-click on the “Intelligent function unit” in the project tree.
- ② Select the menu item “Add new unit”.



- ③ Select the “AnyWireASLINK interface unit” in the Unit Type field.
- ④ The model “QJ51AW12AL” appears in the Unit Model field.
- ⑤ Click on the OK button.



- ⑥ The model “QJ51AW12AL” is now added as an intelligent function unit in the project tree.



FAQ

0000:QJ51AW12AL

This number represents the start XY address.

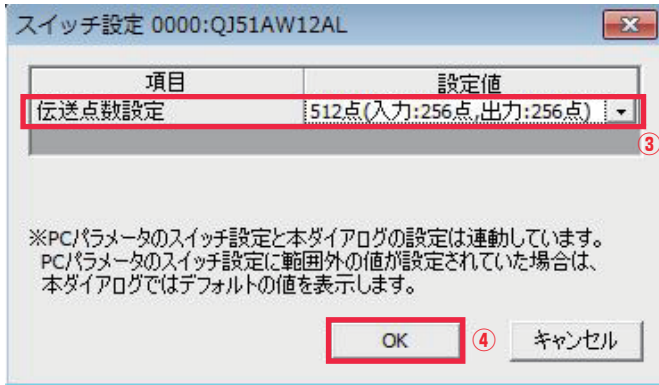
■ Setting the number of transmission points

Now set the “number of transmission points for the AnyWireASLINK system”.

- ① Double-click on the “QJ51AW12AL” icon in the project tree (or click on the “+” sign) to open it.
- ② Double-click on the “Switch setting”.



- ③ Select the “number of transmission points” appropriate for the system. (Here, it is 512 points (256 inputs and 256 outputs)).
- ④ Click on the “OK” button.



■ Assignment of the buffer memory and device

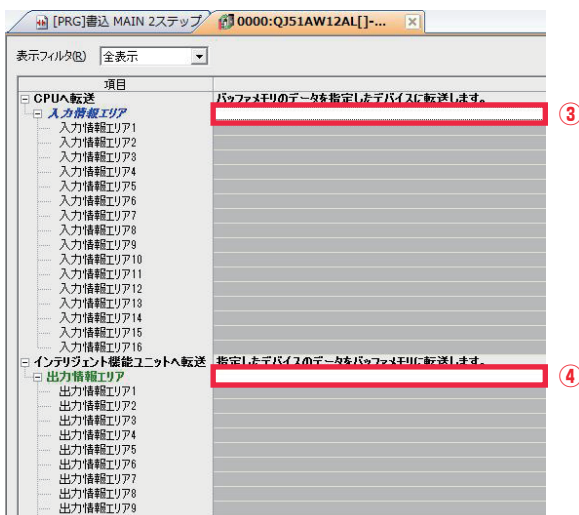
The data in the AnyWireASLINK system are exchanged with the sequencer via a buffer memory in the master unit. There are two ways to link the buffer memory and the sequencer device: “Auto Refresh” and “Programming”.

[Auto Refresh]

- ① Double-click on the “QJ51AW12AL” icon in the project tree (or click on the “+” sign) to open it.
- ② Double-click on “Auto Refresh”.



- ③ Enter the start of the device that needs to be linked in the input data area (256 points) of buffer memory.
- ④ Enter the start of the device that needs to be linked in the output data area (256 points) of buffer memory.



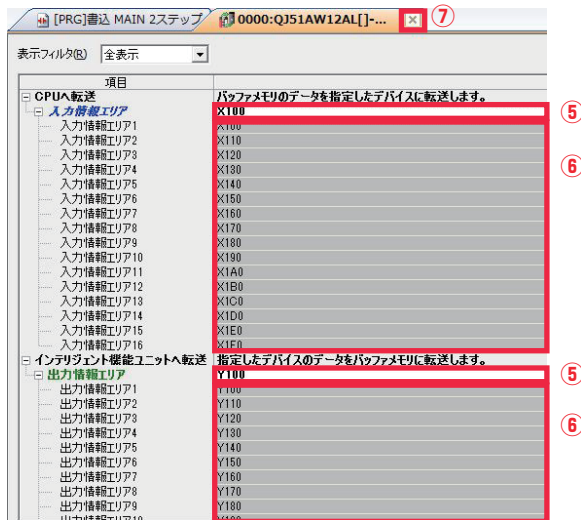
Tips

In the Auto Refresh operation, all 256 points for input and output (fixed) will be refreshed irrespective of the number of transmission points set in the “Switch setting”.
To link the number of points other than 256, use Programming.

⑤ Enter the start device. (Here, X100 for the input data area and Y100 for the output data area.)

⑥ The device name appears in the input (output) data area 1 to 16 automatically.

⑦ Click on "X" to close the screen.



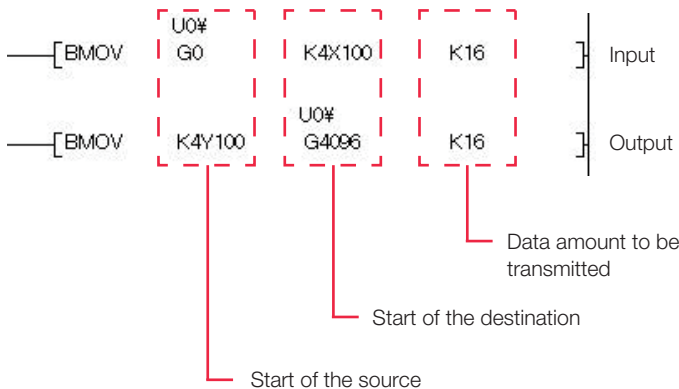
Tips

The new entries made in the setting screen will not be enabled unless the Auto Refresh screen is closed by clicking on "X".

Perform the "Write to the PC" operation after closing the Auto Refresh screen by clicking on "X".

[Programming]

An example of programming



FAQ

U0#

The start XY of master unit
The number obtained by dividing the start XY (hexadecimal number) by "16" (decimal number).
E.g. For the start XY0020, "U2#".

G0 (4096)

Buffer memory address (decimal number)
The input data area is "0" to "15".
The output data area starts in the range from "4096" to "4111".
* For further information on the buffer memory, refer to the manual of each master unit.

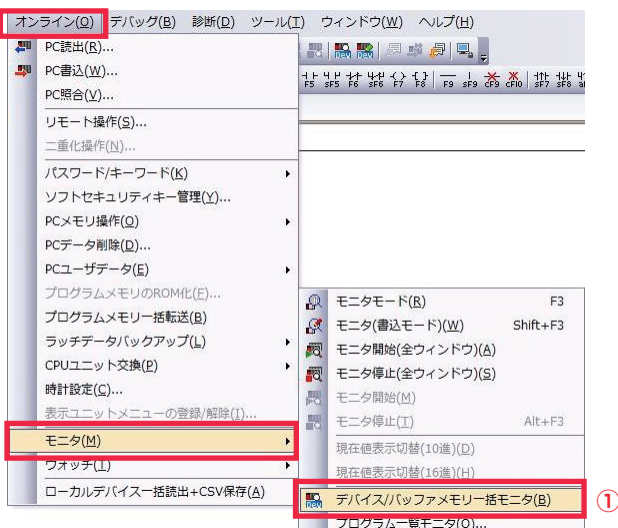
K16

The data amount to be transmitted (unit: word)
E.g. "K2" for 32 points.

I/O check with GX Works2

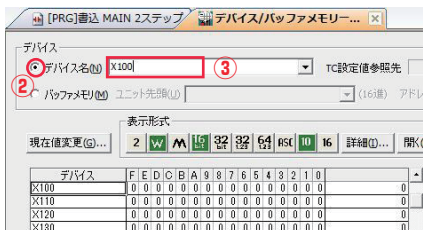
Perform an I/O check using the GX Works2.

① Select "Online", "Monitor" and then "Device/buffer memory joint monitor".



[Device Monitor]

- ② Check the “Device” radio button.
- ③ Enter the device to be monitored. (Here, X100.)



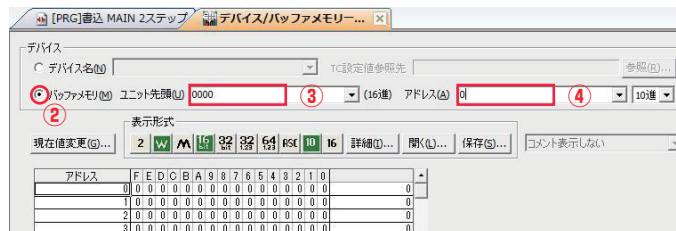
Tips

If the setting to link the buffer memory and the device is not performed properly, it is not possible to monitor the input and output behavior using the device.

For the output, set the device to "Y100", for example.

[Buffer Memory Monitor]

- ② Check the "Buffer Memory" radio button.
- ③ Enter the start of the unit (start XY address). (Here, 0000.)
- ④ Enter the buffer memory address to be monitored. (Here, "0".)

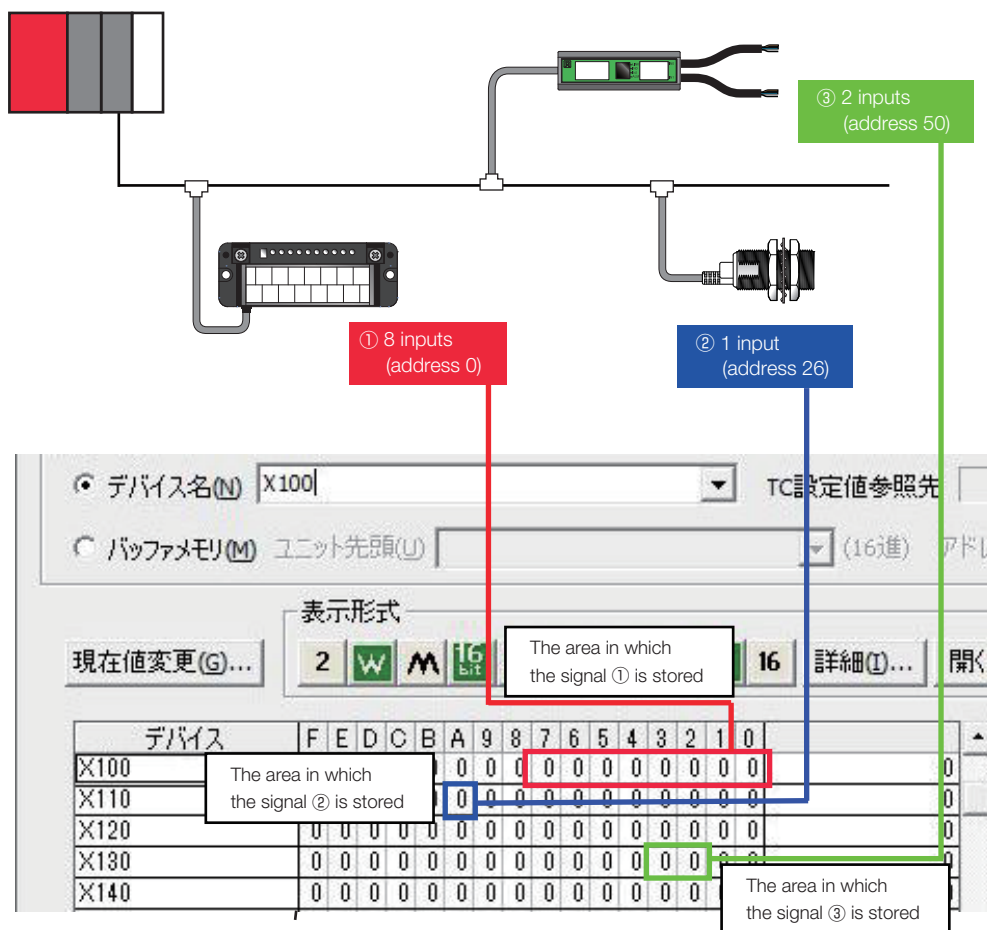


Tips

If the setting to link the buffer memory and the device works, it is not possible to check the output by writing data directly to the buffer memory.

For the output, set the buffer memory address to "4096".

[An example of Device Monitor]



Correspondence with the AnyWireASLINK address numbers

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48
79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64

[Address]

Anywire Anywire Corporation

Headquarters :1 Babazusho, Nagaokakyo-shi, Kyoto 617-8550 JAPAN

Contact :Contact by mail info_e@anywire.jp
:Contact by website <http://www.anywire.jp>