

F701-C
CC-Link I/F
SPECIFICATIONS

INTRODUCTION

This document describes the standard specifications of the CC-Link I/F. (CC-Link Ver.1.10 Compliant)
By using the CC-Link I/F, the F701-C can be controlled directly from the PLC, so that wiring can be substantially reduced.

F701-C with CC-Link I/F operates as the remote device stations.

Readers of this document should have basic knowledge of the programming of the PLC and basic knowledge of the CC-Link I/F.

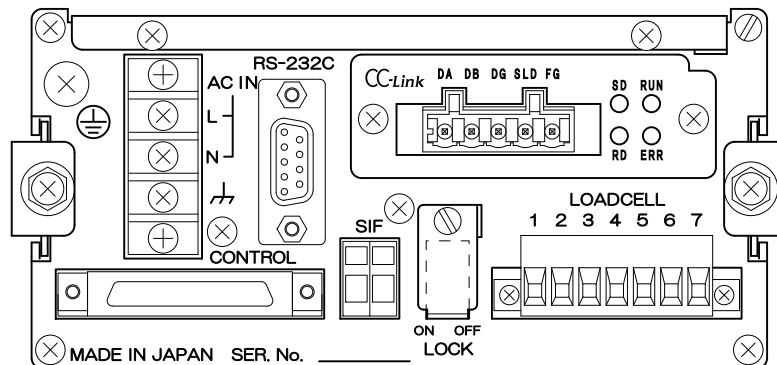
(CC-Link is an abbreviation for Control & Communication Link.)

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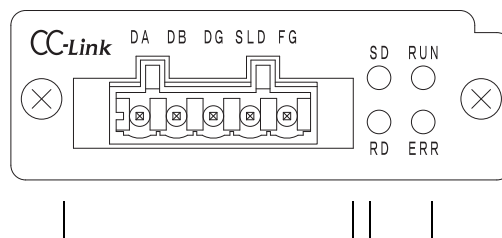
1.APPEARANCE DESCRIPTIONS

1-1. F701-C with CC-Link I/F



2.NAME OF EACH PART

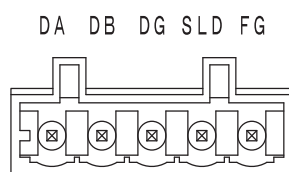
2-1. CC-Link I/F



1.Communication connector
Connector for CC-Link interface.

2.Status LED
Displays the status of communication.

2-1-1. Communication connector

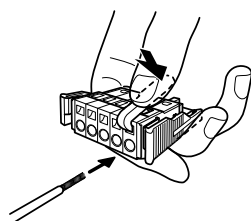


DA : (Signal line DA side)
DB : (Signal line DB side)
DG : (Signal line Ground)
SLD : (Shield)
FG : (Frame Ground)

SLD and F.G. are connected inside.

Suitable plug for the connection is “721-105/037-000” (an accessory parts) made by WAGO CO., Ltd. or equivalent one.

Operating method



- Pinch the plug and operate the lever with a thumb.
- For protecting the CC-Link option from damage, do not operate the lever without removing the plug.

**Notice**

When the F701-C is a unit at end, termination resistance must be installed. (Confirm with the CC-Link specifications.) At this time, when the DA and DB signal lines and resistance are to be connected to the connector, be aware that poor contact may result if the nipping conditions differ between the leg of the resistance and signal lines. There is a possibility of abnormal operation.

2-1-2. Status LED

LED expresses the status of communication.

Name of LED	Light ON	Light OFF	Blinking
RUN	• Normal	• Reset Action • No Communication	— — — — —
SD	• Transmitting	— — — — —	— — — — —
RD	• Receiving	— — — — —	— — — — —
ERR	• Setting Error • CRC Error • Fault	• Normal	— — — — —

3.F701-C SETTING

Set by key operation. (No change can be made by RS-232C communication.)

3-1. CC-Link Communication Condition • Station No. Setting

The F701-C is a remote device station which supports CC-Link Ver.1.10.

- Number of occupied station (Initial value: 4 stations) : 1, 2, 4 stations

Set the numbers of occupied stations as the remote device for F701-C.

Address map will be changed according to the numbers of stations.

- Transmission speed (Initial value: 10M) : 156k, 625k, 2.5M, 5M, 10M

Decide transmission speed.

- Station No. (Initial value: No.1) :
No.1 to 64 (when occupies 1 station)
No.1 to 63 (when occupies 2 stations)
No.1 to 61 (when occupies 4 stations)

Set slave station number.

**Notice**

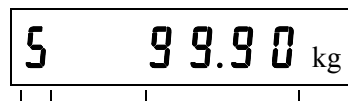
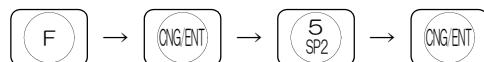
About setting of Mitsubishi general-purpose PLC CPU unit

If using Mitsubishi general-purpose PLC MELSEC-Q series, please set the mode configuration and station type as following in the configuration of master station network parameters.

- Mode configuration: Remote net Ver.1 mode
- Station type: Remote device stations
("Station information" → "Station type")

■ Setting method < Setting mode 5-3 > Number of occupied station & Transmission speed

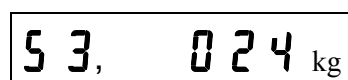
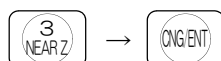
Select setting mode 5.



The selected setting mode number and weight value are displayed (Setting mode display).

Setting mode number Present weight value


Select setting item 3 with setting mode 5 selected.

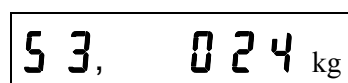


The setting mode number, setting item number, and present setting value are displayed.



Setting mode number Setting item number Present setting value


The highest digit of the setting value blinks.

Move with the  key.

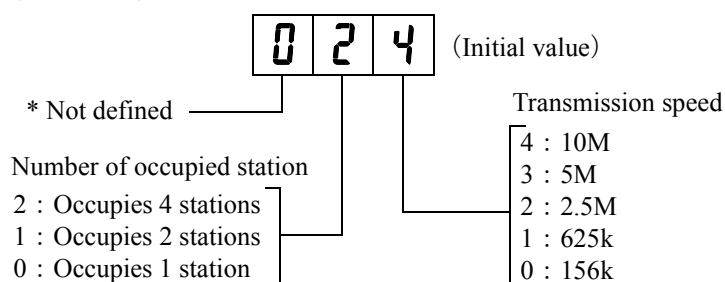


The setting value of the blinking digit can be changed. Correct choices are input.

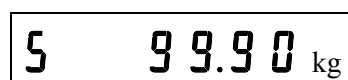
(It selects from  to  and it pushes. (Refer to choices to the figure below.)

The blinking digit moves to the lower one. Since the blinking digit moves every time the  key is pressed, setting can be redone again and again.

< Choices >



After the correct choice is input, press the  key to enter the choice.



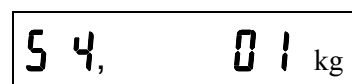
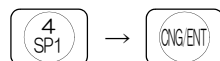
The display returns to the setting mode display.

(Setting mode 5 selected.)

Setting mode number Present weight value

■ Setting method < Setting mode 5-4 > Station No.

Select setting item 4 with setting mode 5 selected.



Setting mode number
Setting item number
Present setting value

The setting mode number, setting item number, and present setting value are displayed.

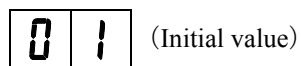
The highest digit of the setting value blinks.

Station No. is set by 2 digits. Input from the higher-order blinking digit.

(Selects from to and push it. (Refer to setting range to the figure below.)

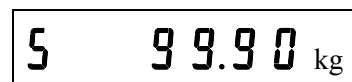
The blinking digit moves to the lower one. Since the blinking digit moves every time the key is pressed, setting can be redone again and again.

< Setting range >



01 ~64

After input the setting value, press the key to enter the setting value.



The display returns to the setting mode display.

(Set mode 5 selected.)

Setting mode number Present weight value



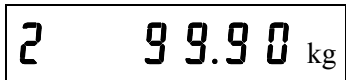
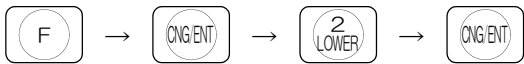
By pressing the key when the setting mode number is displayed, you can go back to normal display (Setting mode 0).

3-2. Change in Auto Free Fall Compensation

Auto Free Fall Compensation setting offers a choice of "2: AFFC.ON (Communication OP invalid)."
At the time of writing in the exclusive data area, writing of compensation data can be prohibited.
Change the setting if necessary.

■ Setting method < Setting mode 2-3 > Auto free fall compensation

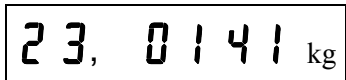
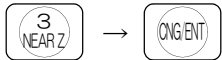
Select setting mode 2.



The selected setting mode number and weight value are displayed (Setting mode display).

Setting mode number Present weight value

Select setting item 3 with setting mode 2 selected.

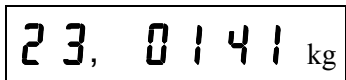


The setting mode number, setting item number, and present setting value are displayed.


The highest digit of the setting value blinks.

Setting mode number Setting item number Present setting value

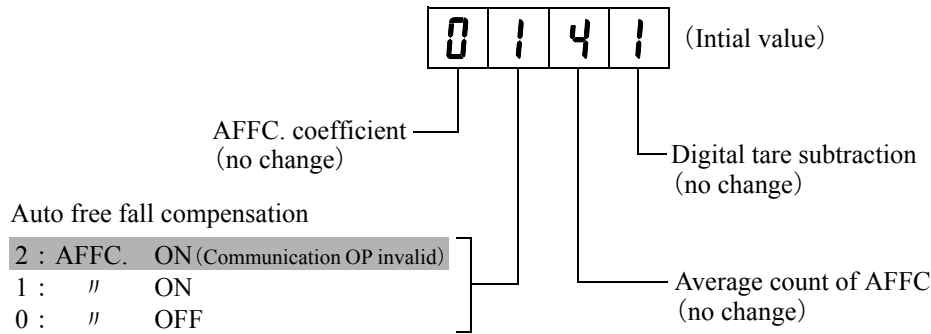
Move with the  key.




Auto free fall compensation

Change AFFC (Auto free fall compensation) to "2". (press the  key.)

< Choices >



4. SEQUENCER ADDRESS

After Auto free fall compensation is changed, press the  key to enter the choice.


2 **99.90** kg

The display returns to the setting mode display.

(Set mode 2 selected.)

Setting mode number Present weight value



By pressing the  key when the setting mode number is displayed, you can go back to normal display (Setting mode 0).

4. SEQUENCER ADDRESS

F701-C enables to change the numbers of occupied stations by its setting.

Be careful to do not overlap the assignment of station number.

The address of remote (F701-C) will be changed in accordance with the assignment of Station No..

Station No.	Remote Input	Remote Output	Remote Resister	
			M → R	R → M
1	RX0000	RY0000	RW _w 0000	RW _r 0000
	00E0H	0160H	01E0H	02E0H
2	RX0020	RY0020	RW _w 0004	RW _r 0004
	00E2H	0162H	01E4H	02E4H
3	RX0040	RY0040	RW _w 0008	RW _r 0008
	00E4H	0164H	01E8H	02E8H

Following address map shows the status when Station No. starts from 1.

4-1. Address Map (Data Domain)

4-1-1. Remote resister M → R (PLC → F701-C)

When occupies 4 stations

Station	Buffer Address	Device M → R	Content		
			MSB	LSB	
1	01E0H	RWw0000	Final 32bit		L H L H Exclusive data area
	01E1H	RWw0001			
	01E2H	RWw0002	Set point 1 32bit		
	01E3H	RWw0003			
2	01E4H	RWw0004	Set point 2 16bit		
	01E5H	RWw0005	Compensation 16bit		
	01E6H	RWw0006	Over 16bit		
	01E7H	RWw0007	Under 16bit		
3	01E8H	RWw0008	Upper limit 32bit		L H L H
	01E9H	RWw0009			
	01EAH	RWw000A	Lower limit 32bit		
	01EBH	RWw000B			
4	01ECH	RWw000C	General purpose data area 32bit		L H
	01EDH	RWw000D			
	01EEH	RWw000E	Not defined 8bit	Command No. 8bit	
	01EFH	RWw000F	Not defined 16bit		

When occupies 2 stations

Station	Buffer Address	Device M → R	Content		
			MSB	LSB	
1	01E0H	RWw0000	Final		L H H Exclusive data area
	01E1H	RWw0001	32bit		
	01E2H	RWw0002	Not defined 16bit		
	01E3H	RWw0003	Compensation 16bit		
2	01E4H	RWw0004	General purpose data area		L H H
	01E5H	RWw0005	32bit		
	01E6H	RWw0006	Not defined 8bit	Command No. 8bit	
	01E7H	RWw0007	Not defined 16bit		

When occupies 1 station

Station	Buffer Address	Device M → R	Content	
			MSB	LSB
1	01E0H	RWw0000	Not defined	
	01E1H	RWw0001		
	01E2H	RWw0002		
	01E3H	RWw0003		

M : Master

R : Remote

4-1-2. Explanation for remote resistor M → R**◎ Exclusive data area**

When resistor Setting value using Request flag 1, set each data in each area respectively.

- Final (32 bit binary) (0 to 99999) (4, 2 stations)

Set a Final value. When Final \geq 99999 was set, it is considered to be 99999.

- Set point 1 (32 bit binary) (0 to 99999) (4 stations)

Set a Set point 1 value. When Set point 1 \geq 99999 was set, it is considered to be 99999.

- Set point 2 (16 bit binary) (0 to 65535) (4 stations)

Set a Set point 2 value. Range 65536 to 99999 is not available for Set point 2.

- Compensation (16 bit binary) (-9999 to 9999) (4, 2 stations)

Set a Compensation value. When the most significant bit indicates "0" means Plus. When it indicates "1" means Minus. When Compensation \geq 9999 was set, it is considered to be 9999.

When 「AFFC.ON (Communication OP invalid)」 is set in Auto free fall compensation, Compensation can not be set.

When 「INHIBIT」 is set in Negative Compensation, input range is 0 to 9999.

- Over (16 bit binary) (0 to 999) (4 stations)

Set an Over value. When Over \geq 999 was set, it is considered to be 999.

- Under (16 bit binary) (0 to 999) (4 stations)

Set an Under value. When Under \geq 999 was set, it is considered to be 999.

- Upper limit (32 bit binary) (0 to 99999) (4 stations)

Set a Upper limit value. When Upper limit \geq 99999 was set, it is considered to be 99999.

- Lower limit (32 bit binary) (0 to 99999) (4 stations)

Set a Lower limit value. When Lower limit \geq 99999 was set, it is considered to be 99999.

◎ General purpose data area (32 bit binary with sign) (-99999 to 99999) (4, 2 stations)

Setting Command or Data to this area by Request flag 2.

When the most significant bit indicates "0" means Plus. When it indicates "1" means Minus.

◎ Command No. (8 bit binary) (0 to 255) (4, 2 stations)

Set a Command number. Be aware that the Request flag 2 does not respond to a invalid command.

4-1-3. Remote resister R → M (F701-C → PLC)

When occupies 4 stations

Station	Buffer Address	Device R → M	Content		
			MSB	LSB	
1	02E0H	RWr0000	Net weight		L
	02E1H	RWr0001			
	02E2H	RWr0002	Gross weight		L
	02E3H	RWr0003			
2	02E4H	RWr0004	Latest accumulated value		L
	02E5H	RWr0005			
	02E6H	RWr0006	Not defined	Error code 8bit	H
	02E7H	RWr0007	Not defined	Error assistance code 8bit	
3	02E8H	RWr0008	Not defined		
	02E9H	RWr0009			
	02EAH	RWr000A			
	02EBH	RWr000B			
4	02ECH	RWr000C	General purpose data area		L
	02EDH	RWr000D			
	02EEH	RWr000E	Not defined	Command No. (Response) 8bit	H
	02EFH	RWr000F	Not defined	16bit	

When occupies 2 stations

Station	Buffer Address	Device R → M	Content		
			MSB	LSB	
1	02E0H	RWr0000	Indicated value (Net / Gross weight)		L
	02E1H	RWr0001			
	02E2H	RWr0002	Not defined	Error code 8bit	H
	02E3H	RWr0003	Not defined	Error assistance code 8bit	
2	02E4H	RWr0004	General purpose data area		L
	02E5H	RWr0005			
	02E6H	RWr0006	Not defined	Command No. (Response) 8bit	H
	02E7H	RWr0007	Not defined	16bit	

When occupies 1 station

Station	Buffer Address	Device R → M	Content		
			MSB	LSB	
1	02E0H	RWr0000	Indicated value (Net / Gross weight)		L
	02E1H	RWr0001			
	02E2H	RWr0002	Not defined	Error code 8bit	H
	02E3H	RWr0003	Not defined	Error assistance code 8bit	

M : Master

R : Remote

4-1-4. Explanation for remote resistor R → M**◎ Net weight ^{*}(32 bit binary with sign) (-99999 to 99999) (4 stations)**

Net weight is indicated. The most significant bit indicates "1" at minus data.

◎ Gross weight ^{*}(32 bit binary with sign) (-99999 to 99999) (4 stations)

Gross weight is indicated. The most significant bit indicates "1" at minus data.

◎ Latest accumulated value ^{*}(32 bit binary with sign) (-99999 to 99999) (4 stations)

Latest accumulated value is indicated. The most significant bit indicates "1" at minus data.

**◎ Indicated value ^{*}(Net/Gross weight)(32 bit binary with sign)
(-99999 to 99999) (2, 1 stations)**

Net or Gross weight is indicated by designated bit.

RY001F ON means Gross and OFF means Net weight. (2 stations)

RY007F ON means Gross and OFF means Net weight. (1 station)

The most significant bit indicates "1" at minus data.



^{*} About Net weight, Gross weight, Latest accumulated value, and Indicated value

• Negative figures are shown below.

Ex)	Net weight	—90000	→	Buffer address 2E0H=5F90H
				Buffer address 2E1H=8001H
	Gross weight	—1	→	Buffer address 2E2H=0001H
				Buffer address 2E3H=8000H

◎ Error code (8bit binary) (0 to 255) (4, 2, 1 stations)

Error code of the Indicator is indicated. When the plural errors occur, the smaller figure (Calibration error) is given high priority.

- 0 : No error
- 1 : Calibration error
- 2 : Sequence error

◎ Error assistance code (8bit binary) (0 to 255) (4, 2, 1 stations)

Precisely, it is an auxiliary to Error code.

The error situation can be confirmed by combining Error code and Error assistance code.

Error code	Error assistance code	Meaning
0	0	No error
1	1	Calibration error 1
	2	Calibration error 2
	3	Calibration error 3
	4	Calibration error 4
	5	Calibration error 5
	6	Calibration error 6
	7	Calibration error 7
	8	Calibration error 8
	9	Calibration error 9
2	1	Sequence error 1
	2	Sequence error 2
	3	Sequence error 3
	4	Sequence error 4
	5	Sequence error 5

◎ Command No. response (8bit binary) (0 to 255) (4, 2 stations)

When the Command is set by Request flag 2, the same data is set here.

4-1-5. Command list

Via Request flag 2 writing / reading Setting value or changing Operation mode according to the given Command number.

Writing Setting value and Operation command	Command No. (RWw000E)	General purpose data area (RWw000C ~ 000D)
Set point 1	10	0 ~ 99999
Set point 2	11	0 ~ 99999
Final	12	0 ~ 99999
Over	13	0 ~ 999
Under	14	0 ~ 999
Compensation	15	-9999 ~ 9999
AFFC Regulation	16	0 ~ 99999
Upper limit	22	0 ~ 99999
Lower limit	23	0 ~ 99999
Near Zero	24	0 ~ 99999
Preset tare weight	25	0 ~ 99999

Command instruction	Command No. (RWw000E)	General purpose data area (RWw000C ~ 000D)
Net weight switch	0	12
Gross weight switch	0	13
Tare subtraction ON (TARE ON)	0	14
Tare subtraction OFF (TARE OFF)	0	15
Digital Zero ON (DZ ON)	0	16
Digital Zero OFF (DZ OFF)	0	17
Accumulation Clear	0	20
Accumulation Command	0	24
Start	0	30
Stop	0	31
Sequence error reset	0	36
Hold	0	37
Hold release	0	38

4-2. Address Map (Relay Domain)

4-2-1. Remoto output (PLC → F701-C)

When occupies 4 stations

Station	Buffer address	Remote output	Content	Class
1	0160H	RY0000	Request flag1	Communication Used for Communication with Host.
		RY0001		
		RY0002	Request flag2	
		RY0003	R/W	
		RY0004	Request flag3	
		RY0005		
		RY0006		
		RY0007		
		RY0008		
		RY0009		
		RY000A		
		RY000B		
		RY000C		
		RY000D		
		RY000E		
		RY000F		
	0161H	RY0010	Digital Zero ON	
		RY0011	Digital Zero OFF	
		RY0012	Tare subtraction ON	
		RY0013	Tare subtraction OFF	
		RY0014	Hold	
		RY0015	Net weight switch	
		RY0016	Gross weight switch	
		RY0017		
		RY0018	Accumulation Command	
		RY0019	Accumulation Clear	
		RY001A	Sequence error reset	
		RY001B	Start	
		RY001C	Stop	
		RY001D		
		RY001E		
		RY001F		
2	0162H	:	:	:
	0163H	:	:	:
3	0164H	:	:	:
	0165H	:	:	:
4	0166H	:	:	:
	0167H	:	:	:

4. SEQUENCER ADDRESS

When occupies 2 stations

Station	Buffer address	Remote output	Content	Class
1	0160H	RY0000	Request flag1	Communication Used for Communication with Host.
		RY0001		
		RY0002	Request flag2	
		RY0003	R/W	
		RY0004	Request flag3	
		RY0005		
		RY0006		
		RY0007		
		RY0008		
		RY0009		
		RY000A		
		RY000B		
		RY000C		
		RY000D		
		RY000E		
		RY000F		
	0161H	RY0010	Digital Zero ON	
		RY0011	Digital Zero OFF	
		RY0012	Tare subtraction ON	
		RY0013	Tare subtraction OFF	
		RY0014	Hold	
		RY0015	Net weight switch	
		RY0016	Gross weight switch	
		RY0017		
		RY0018	Accumulation Command	
		RY0019	Accumulation Clear	
		RY001A	Sequence error reset	
		RY001B	Start	
		RY001C	Stop	
		RY001D		
		RY001E		
		RY001F	Indicated value Net/Gross weight	
2	0162H	:	:	:
	0163H	:	:	:

When occupies 1 station

Station	Buffer address	Remote output	Content	Class
1	0160H	RY0000	Digital Zero ON	
		RY0001	Digital Zero OFF	
		RY0002	Tare subtraction ON	
		RY0003	Tare subtraction OFF	
		RY0004	Hold	
		RY0005	Net weight switch	
		RY0006	Gross weight switch	
		RY0007	Indicated value Net/Gross weight	
		RY0008	Accumulation Command	
		RY0009	Accumulation Clear	
		RY000A	Sequence error reset	
		RY000B	Start	
		RY000C	Stop	
		RY000D		
		RY000E		
		RY000F		
	0161H	:	:	:

4-2-2. Remote output RY (PLC → F701-C) signal

Name of signal	Meaning of signal
Request flag 1	During write Setting value into Exclusive data area, the Output signal is ON, after receiving Request flag 1 response, the signal goes OFF.
Request flag 2	During write Command into General purpose data area, the Output signal is ON, after receiving Request flag 2 response, the signal goes OFF.
R/W	Read out Command or Write Command into General purpose data area is decided by ON / OFF of the Output signal. Signal is ON → Read while OFF → Write. READ : Read out various Setting value from the indicator. WRITE : Write various Setting value and give the operation command to F701-C.
Request flag 3	This function is for the expansion. (Now unused)
Digital Zero ON	Gross weight to zero by ON edge.
Digital Zero OFF	Digital Zero is reset by ON edge.
Tare subtraction ON	Tare subtraction is set by ON edge.
Tare subtraction OFF	Tare subtraction is reset by ON edge.
Hold	Hold weighing value (Hold function is not available in Sequence mode). Hold is started by ON edge and is released by OFF edge.
Net weight switch	Switch to Net weight by ON edge.
Gross weight switch	Switch to Gross weight by ON edge.
Accumulation Command	Accumulation is executed by ON edge. A print command is sent to a UNIPULSE-made printer that is connected through the SI/F.
Accumulation Clear	Clearing of accumulated data and statistical data is executed by ON edge.
Sequence error reset	Sequence error is reset by ON edge.
Start	Sequence start by ON edge. Valid only when used in the sequence mode.
Stop	Sequence stop by ON edge. Valid only when used in the sequence mode.
Indicated value (Net/Gross weight)	Valid only when occupies 2 stations or 1 station. Output signal ON: Gross weight output Output signal OFF: Net weight output

4-2-3. Remote input (F701-C → PLC)

When occupies 4 stations

Station	Buffer address	Remote input	Content	Class
1	00E0H	RX0000	Request flag 1 response	Communication Used for the Communication with Host.
		RX0001		
		RX0002	Request flag 2 response	
		RX0003	R/W (response)	
		RX0004	Request flag 3 response	
		RX0005		
		RX0006	CPU Normal operation	
		RX0007		
		RX0008	+ LOAD	
		RX0009	− LOAD	
		RX000A	OFL1	
		RX000B	OFL2	
		RX000C	OFL3	
		RX000D	Zero alarm	
		RX000E	Decimal place 1	
		RX000F	Decimal place 2	
	00E1H	RX0010	Near Zero	
		RX0011	Set point 1	
		RX0012	Set point 2	
		RX0013	Set point 3	
		RX0014	Over	
		RX0015	Go	
		RX0016	Under	
		RX0017	Stable	
		RX0018	Complete	
		RX0019		
		RX001A	Holding	
		RX001B	Upper limit	
		RX001C	Lower limit	
		RX001D		
		RX001E	Sequence error	
		RX001F	Weight error	
2	00E2H	:	:	:
	00E3H	:	:	:
3	00E4H	:	:	:
	00E5H	:	:	:
4	00E6H	:	:	:
	00E7H	RX0070		
		:	:	:
		RX007A	Error status flag	
		RX007B	Remote ready	
		:	:	:
		RX007F		

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When occupies 2 stations

Station	Buffer address	Remote input	Content	Class
1	00E0H	RX0000	Request flag 1 response	Communication Used for the Communication with Host.
		RX0001		
		RX0002	Request flag 2 response	
		RX0003	R/W (response)	
		RX0004	Request flag 3 response	
		RX0005		
		RX0006	CPU Normal operation	
		RX0007		
		RX0008	+ LOAD	
		RX0009	— LOAD	
		RX000A	OFL1	
		RX000B	OFL2	
		RX000C	OFL3	
		RX000D	Zero alarm	
		RX000E	Decimal place 1	
		RX000F	Decimal place 2	
	00E1H	RX0010	Near Zero	
		RX0011	Set point 1	
		RX0012	Set point 2	
		RX0013	Set point 3	
		RX0014	Over	
		RX0015	Go	
		RX0016	Under	
		RX0017	Stable	
		RX0018	Complete	
		RX0019		
		RX001A	Holding	
		RX001B	Upper limit	
2	00E2H			
	00E3H	RX0030		
		:	:	:
		RX003A	Error status flag	
		RX003B	Remote ready	
		:	:	:
		RX003F		

When occupies 1 station

Station	Buffer address	Remote input	Content	Class
1	00E0H	RX0000	Near Zero	
		RX0001	Set point 1	
		RX0002	Set point 2	
		RX0003	Set point 3	
		RX0004	Over	
		RX0005	Go	
		RX0006	Under	
		RX0007	Stable	
		RX0008	Complete	
		RX0009		
		RX000A	Holding	
		RX000B	Upper limit	
		RX000C	Lower limit	
		RX000D		
		RX000E	Sequence error	
		RX000F	Weight error	
	00E1H	RX0010		
		RX0011		
		RX0012		
		RX0013		
		RX0014		
		RX0015		
		RX0016		
		RX0017		
		RX0018		
		RX0019		
		RX001A	Error status flag	
		RX001B	Remote ready	
		RX001C		
		RX001D		
		RX001E		
		RX001F		

4-2-4. Remote input RX (F701-C → PLC) signal

Name of signal	Meaning of signal
Request flag 1 response	After Setting value was written into Exclusive data area, Input signal is ON. It goes off after confirmation of Request flag 1 Output signal went OFF.
Request flag 2 response	After Command was written into General purpose data area, Input signal is ON. It goes off after confirmation of Request flag 2 Output signal went OFF.
R/W response	When Request flag 2 response signal goes ON, the R/W response signal goes the same status as R/W Output signal.
Request flag 3 response	This function is for the expansion. (Now unused)
CPU Normal operation	The signal is reversed between ON and OFF at approx. 1 second interval in Normal operation.
+ LOAD*	When the indicator is in +LOAD, the +LOAD signal turns ON.
− LOAD*	When the indicator is in -LOAD, the -LOAD signal turns ON.
OFL1*	When the indicator is in OFL1, the OFL1 signal turns ON.
OFL2*	When the indicator is in OFL2, the OFL2 signal turns ON.
OFL3*	When the indicator is in OFL3, the OFL3 signal turns ON.
Zero alarm	When the indicator is in zero alarm, the Zero alarm signal turns ON.
Decimal place 1	Indicates Decimal place.
Decimal place 2	0 : #####、1 : #####.#、2 : ###.##、3 : ##.###
Near Zero	When Near zero of indicator is ON, the signal turns ON.
Set point 1	When Set point 1 of indicator is ON, the signal turns ON.
Set point 2	When Set point 2 of indicator is ON, the signal turns ON.
Set point 3	When Set point 3 of indicator is ON, the signal turns ON.
Over	When Over of indicator is ON, the signal turns ON.
Go	When Go of indicator is ON, the signal turns ON.
Under	When Under of indicator is ON, the signal turns ON.
Stable	When Stable of indicator is ON, the signal turns ON.
Complete	When Complete of indicator is ON, the signal turns ON.
Holding	When Holding of indicator is ON, the signal turns ON.
Upper limit	When Upper limit of indicator is ON, the signal turns ON.
Lower limit	When Lower limit of indicator is ON, the signal turns ON.
Weight error	When Weight error occurred (+ LOAD, − LOAD, OFL1, OFL2, OFL3, ZALM) the signal turns ON.
Error status flag	When Calibration or Sequence error occurred, the signal turns ON.
Remote ready	After Initial processing was done and the Error status flag is OFF, the signal turns ON.

*** Over Scale**

- ±LOAD : A/D converter overflowed
- OFL1 : Net weight > Net Over set value
- OFL2 : Gross weight > Capacity + 9 scale division
- OFL3 : Gross weight > Gross Over set value

**Notice**

Please confirm ON of Remote ready after turning on the power supply.

Don't turn on Request flag 1 (RY0000), Request flag 2 (RY0002) and Request flag 3 (RY0004) while the Remote Ready is OFF. There is a possibility for it to become impossible to operate normally if writing to Remote output or to Remote register M → R before it is turned ON.

Moreover, please conduct initialize process on PLC for access to F701-C if they were turned OFF due to the power failure etc.

4-3. Setting Procedure

(The Upper signal level is ON. The Lower signal level is OFF.)

4-3-1. Exclusive data area for setting value by request flag 1

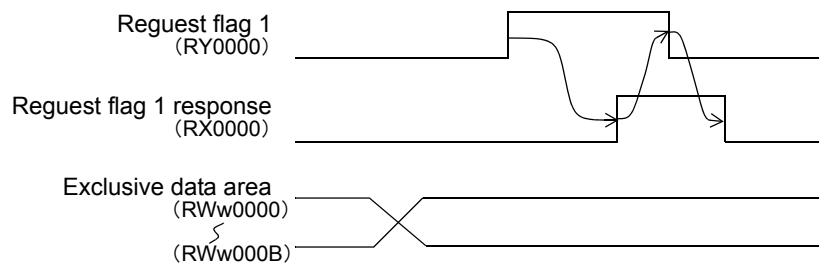
Request flag 1 is used when Setting value is written in.

The Setting value is written in by Request flag 1 ON edge while Request flag 1 to 3 and Request flag response 1 to 3 are OFF.

RWw0000 to RWw000B when occupies 4 stations, RWw0000 to RWw0003 when occupies 2 stations become Exclusive data area.

* When power supply is turned on, please set Request flag 1 to ON after confirming Remote ready is turned ON.

Ex) When occupies 4 stations



4-3-2. General purpose data area for setting value by request flag 2.

Request flag 2 is used for reading out and writing in Setting value and executing operation command.

It is operated at ON edge of Request flag 2 while Request flag 1 to 3 and Request flag 1 to 3 response are OFF.

RWw000C to RWw000D when occupies 4 stations, RWw0004 to RWw0005 when occupies 2 stations become General purpose data area.

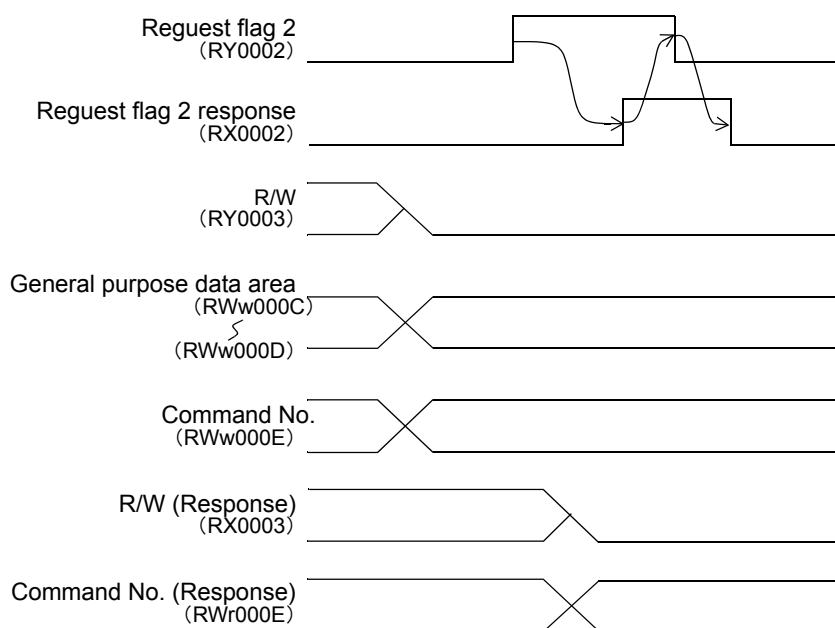
RWw000E when occupies 4 stations, RWw0006 when occupies 2 stations become Command No. area.

Turn ON R/W for reading out Setting value.

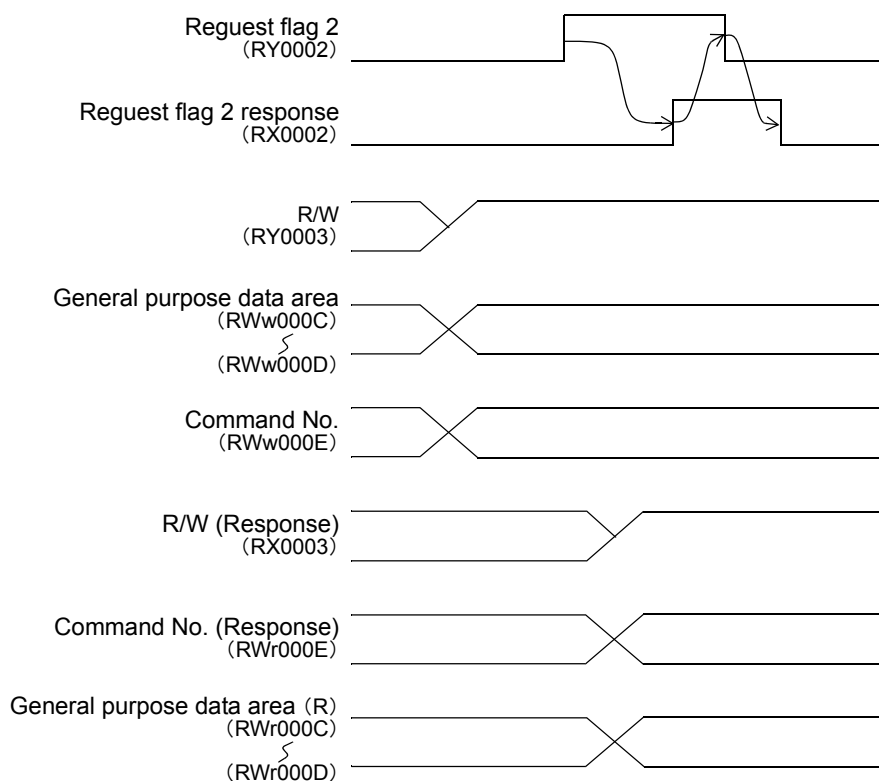
Turn OFF R/W for writing in Setting value and executing operation command.

* When power supply is turned on, please set Request flag 2 to ON after confirming Remote ready is turned ON.

Ex) When occupies 4 stations (writing in Setting value or executing operation command)



Ex) When occupies 4 stations (reading out setting value)



Sample of ladder program

This sample increment the Final value from 0 to 99999.

Use CPU A1SH (Mitsubishi)

Station No. 1

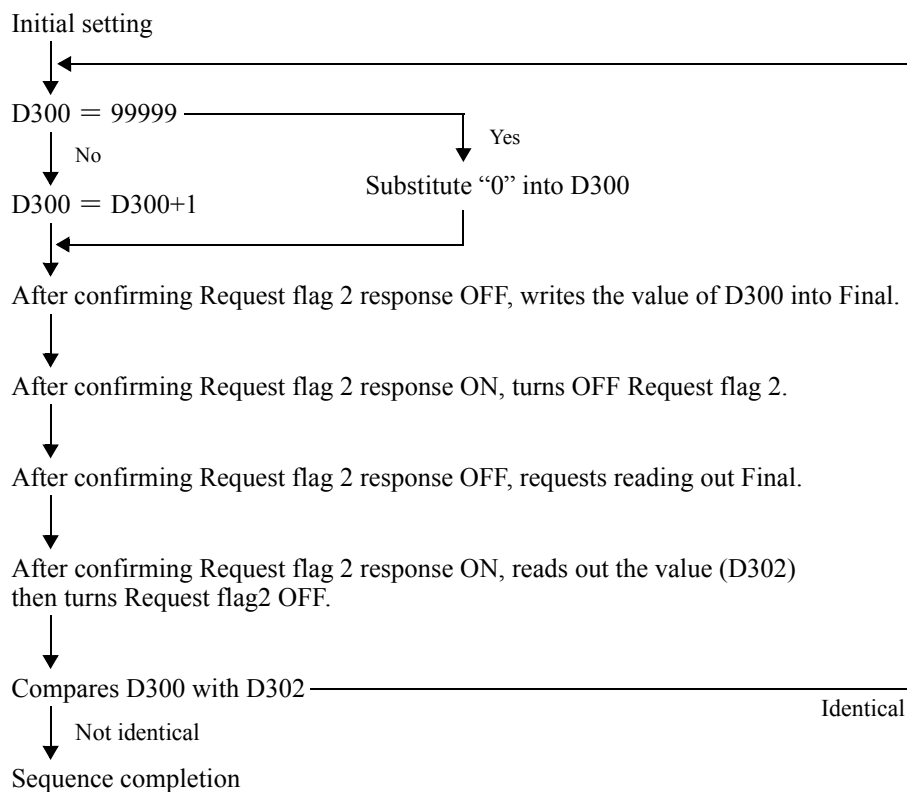
Slot of Master 3

(The relay area to be used is X60 ~ X7F and Y60 ~ Y7F.)

In detail refer to [CC-Link System Master/Local Module Type AJ61BT11/A1SJ61BT11 User's Manual] (Refer to pages around 6-4)

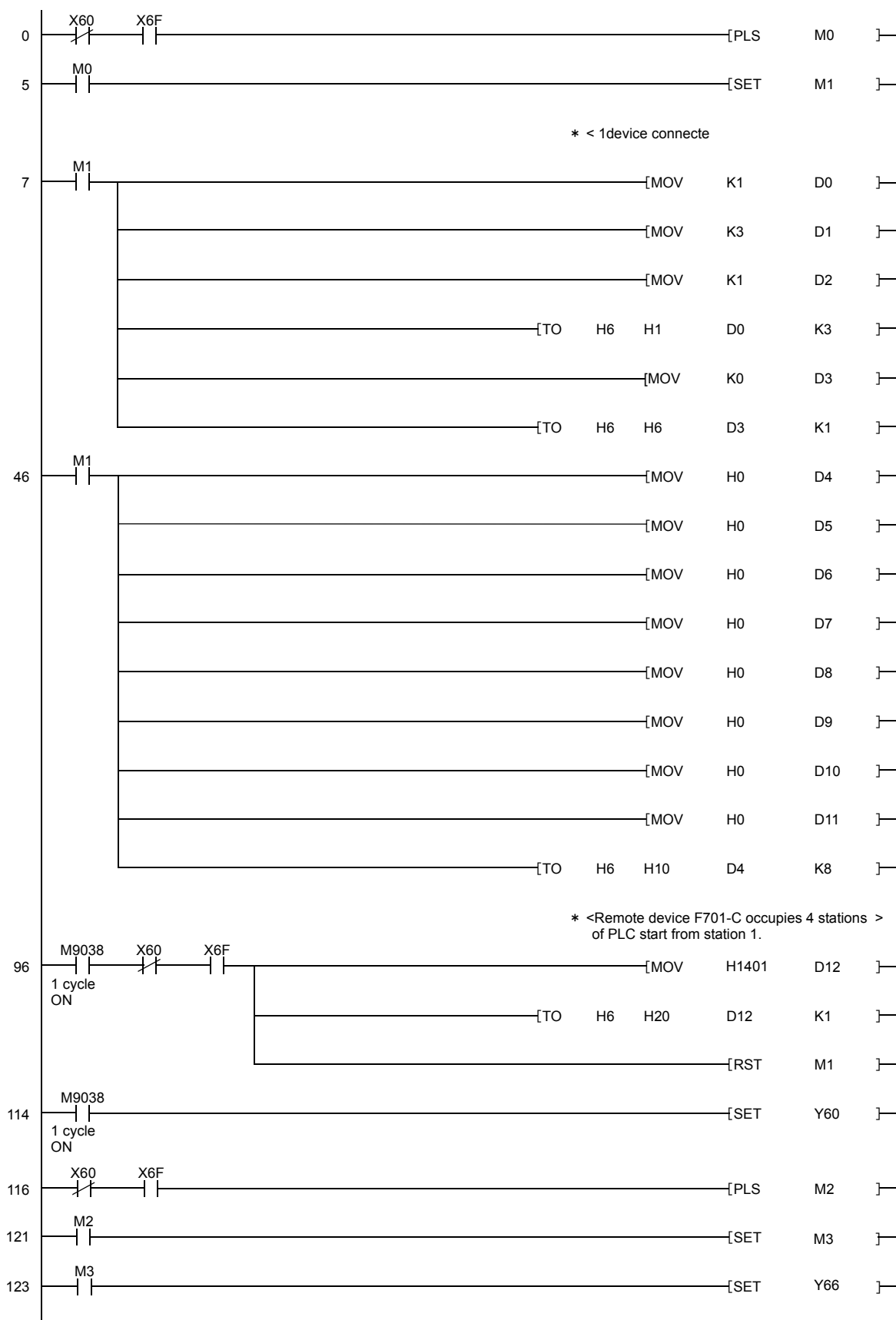
After Writing in and Reading out Final value by Request 2 flag, compares each value then increases its value if each value coincides. It repeated up to 99999 and returns 0 after reaching 99999.

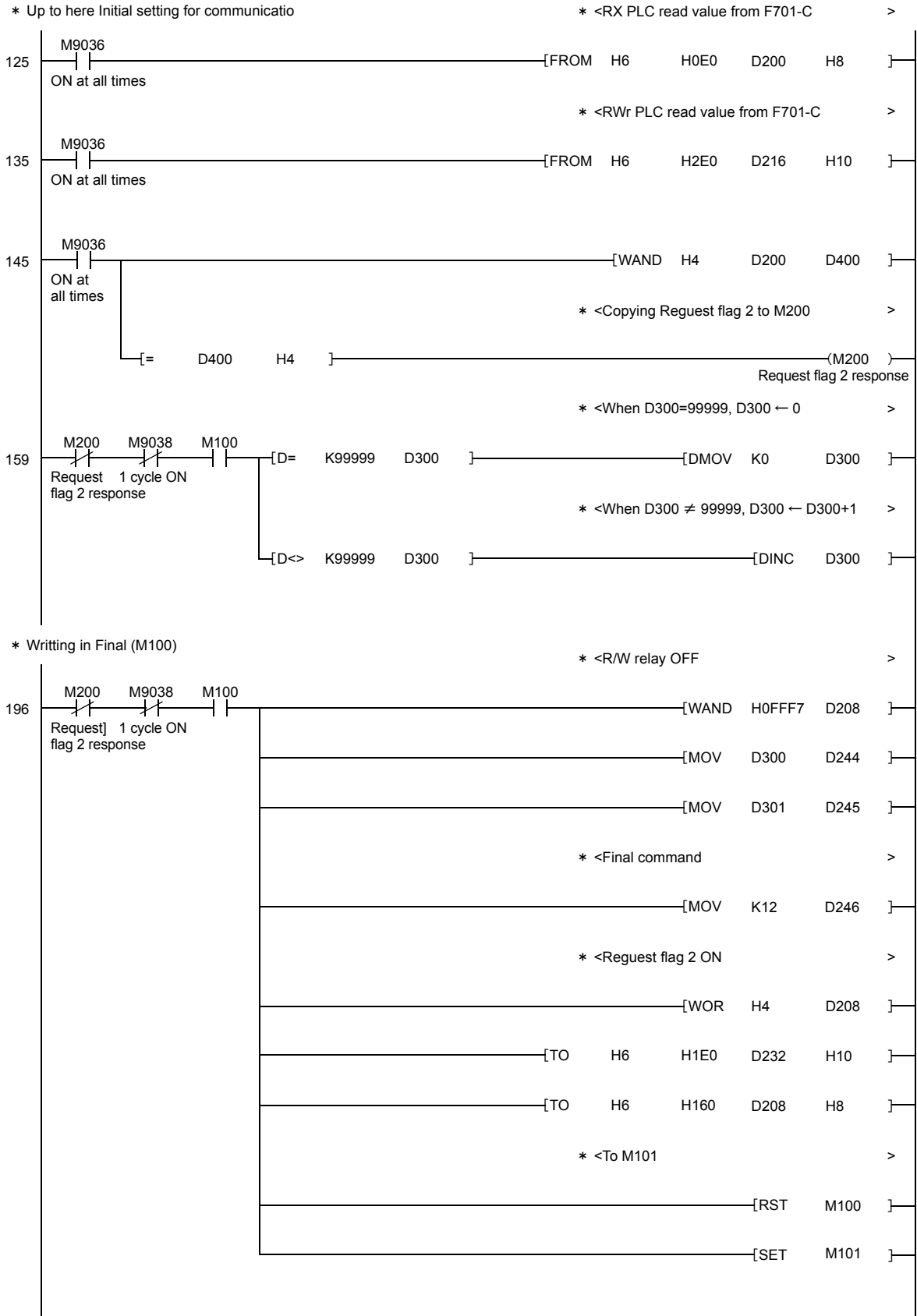
Flow chart



0 to 123 row	Initial setting for Transmission speed
96 row	Remote device F701-C occupies 4 stations of PLC start from station 1.
125 row	RX PLC read value from F701-C
135 row	RWr PLC read value from F701-C
145 row	Copying Request flag 2 response to M200
196 row	Writing Final value
263 row	Reading Final value
321 row	Comparing the value written in and the value read out. When each value coincides with proceeds to 159 row.
334 row	Data Initialization

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