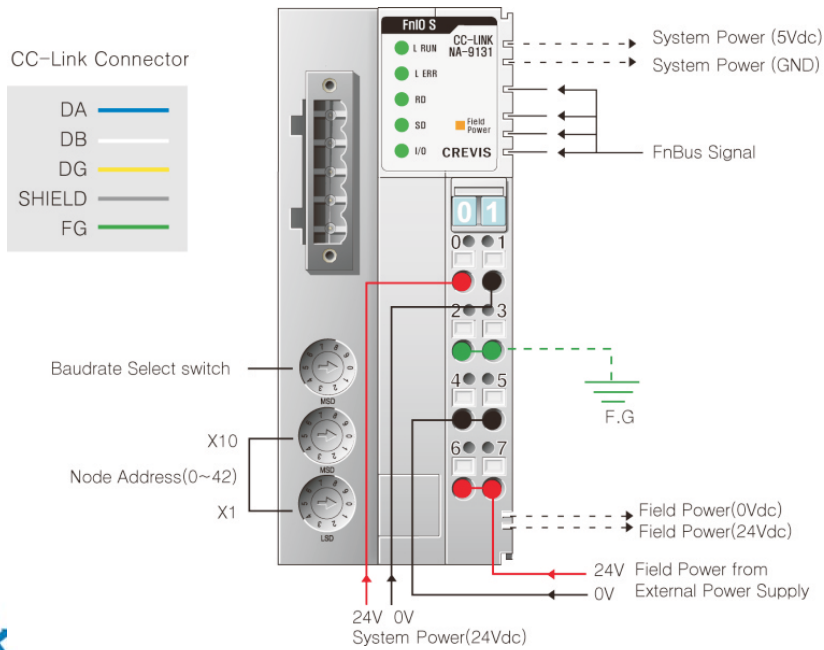


CC-Link Network Adapter, RX/RY 112 points and RWr/RWw 16 points



Item NA-9131	
<b>Interface Specifications</b>	
Protocol Version	Version 1
Station Type	Remote Device Station
Number of Nodes	42 Node/Max (Rotary switch# 0~99)
Number of Expansion I/O Slot	Max. 32 Slots
I/O Data Size	System area : 16 points RX / RY : 112 points (4 Stations occupied) RWr / RWw : 16 points (4 Stations occupied)
Indicators	1 Green L RUN Status Indicator 1 Red L Error Status Indicator 1 Green RD Status Indicator 1 Green SD Status Indicator 1 Green / Red Expansion Module Status Indicator 1 Green Field Power Status Indicator
Baud Rate	156 / 625 / 2500 / 5000 / 10000 Kbps
Module Location	Starter module - left side of FnIO System
Connection cable	CC-Link dedicated cable
Terminal resistor	110ohm, 1/2W (Between DA and DB)
<b>General Specification</b>	
System Power	Supply Voltage : 24Vdc nominal Voltage Range : 11~28.8Vdc Protection : Output Current Limit (Min 1.5A) Reverse Polarity Protection
Power Dissipation	60mA Typical @24Vdc
Current for I/O Module	1.5A @5Vdc
Isolation	System Power : Non-isolation System to Logic : Isolation
Field Power	Supply Voltage : 24Vdc nominal Voltage Range : 11~28.8Vdc
Max. Current in Jumper Contact	DC 10A Max.
Weight	155g
Module Size	45mm x 99mm x 70mm
Environment Condition	Refer to " Environment Specification"(page : 1-191)

# Network Adapter

## Status Indicator LED

### L RUN LED

Status	LED is	To indicate
Not Powered Not on-line	Off	Device is not on-line or may not be powered Resetting Hardware
Connection-Timeout		Device is Timeout
On-Line Connection	Green	Device is on-line and allocated to a master

### L ERR LED

Status	LED is	To indicate
Fail		CRC error
Switch Setting Error	Red	Invalid MAC ID
Communication Error		Baud Rate switch setting error
Setting Change	Flashing Red	Switch setting has been changed from the setting at the reset cancelation
Device Operational	Off	The unit is operating in normal condition

### RD LED

Status	LED is	To indicate
Unable detect	Off	Unable to detect carriers neither for channel 1 or 2
Connection	Green	Detection the carrier for channel 1 or 2

### SD LED

Status	LED is	To indicate
Not transmission	Off	Other than listed in the left
Connection	Green	During transmission

### Field Power : Field Power Status LED

Status	LED is	To indicate
Not Supplied Field Power	Off	Not supplied 24Vdc field power
Supplied Field Power	Green	Supplied 24Vdc field power

### I/O : Expansion Module Status LED

Status	LED is	To indicate
Not Powered No Expansion Module	Off	Device has no expansion module or may not be powered
Fn-Bus On-line, Do not Exchanging I/O	Flashing Green	Fn-Bus is on-line but does not exchanging I/O data - Passed the expansion module configuration
Fn-Bus Connection, Run Exchanging I/O	Green	Expansion Slot is connected and run exchanging I/O data
Fn-Bus Connection Fault during Exchanging I/O	Red	One or more expansion module occurred in fault state - Changed expansion module configuration - Fn-Bus communication failure
Expansion Configuration Failed	Flashing Red	Failed to initialize expansion module - Detected in invalid expansion module ID - Overflowed Input/Output Size - Too many expansion module - Initial protocol failure - Mismatch vendor code between adapter and expansion module

Remote input area

Address	Configuration	Size	Signal name
RXm0 ~ RXmF	1 Station	2 Bytes	Discrete Input
RX(m+1)0 ~ RX(m+1)F	2 Station	6 Bytes	
RX(m+2)0 ~ RX(m+2)F	2 Station	10 Bytes	
RX(m+3)0 ~ RX(m+3)F	3 Station		
RX(m+4)0 ~ RX(m+4)F	3 Station	14 Bytes	
RX(m+5)0 ~ RX(m+5)F	4 Station		
RX(m+6)0 ~ RX(m+6)F	4 Station	2 Bytes	
RX(m+n)0 ~ RX(m+n)F	n=1, 3, 5, 7 (1 Station, 2 Station, 3 Station, 4 Station)		

m : Register number that was introduced by head station number  
 n : Final register number for occupied number  
 1 station : 16 point(n=1) / 2 station : 48 point(n=3) / 3 station : 80 point(n=5) / 4 station : 112 point(n=7)

Remote output area

Address	Configuration	Size	Signal name
RYm0 ~ RYmF	1 Station	2 Bytes	Discrete Output
RY(m+1)0 ~ RY(m+1)F	2 Station	6 Bytes	
RY(m+2)0 ~ RY(m+2)F	2 Station	10 Bytes	
RY(m+3)0 ~ RY(m+3)F	3 Station		
RY(m+4)0 ~ RY(m+4)F	3 Station	14 Bytes	
RY(m+5)0 ~ RY(m+5)F	4 Station		
RY(m+6)0 ~ RY(m+6)F	4 Station	2 Bytes	
RY(m+n)0 ~ RY(m+n)F	n=1, 3, 5, 7 (1 Station, 2 Station, 3 Station, 4 Station)		

RWr/RWw area

Address	Configuration	Size	Signal name	Address	Configuration	Size	Signal name
RWrm0	1 Station	4 Word	Analog Input and Special Module (ST-5xxx)	RWrm0	1 Station	4 Word	Analog Output and Special Module (ST-5xxx)
...				RWrm3			
RWrm4	2 Station	8 Word		RWrm4	2 Station	8 Word	
...				RWrm7			
RWrm8	3 Station	12 Word		RWrm8	3 Station	12 Word	
...				RWrm11			
RWrm12	4 Station	16 Word		RWrm12	4 Station	16 Word	
...				RWrm15			
...				...			
RWrm127				RWrm127			

System area

Link Input	Signal name	Link Output	Signal name
RX(m+n)0	Reaction on network error	RY(m+n)0	Reaction on network error
RX(m+n)1	Reaction on network error	RY(m+n)1	Reaction on network error
RX(m+n)2	Reserved	RY(m+n)2	Reserved
RX(m+n)3	Reserved	RY(m+n)3	Reserved
RX(m+n)4	Reserved	RY(m+n)4	Reserved
RX(m+n)5	Reserved	RY(m+n)5	Reserved
RX(m+n)6	Msg service ready	RY(m+n)6	Msg service start request
RX(m+n)7	Msg response completed	RY(m+n)7	Msg request
RX(m+n)8	Reserved	RY(m+n)8	Reserved
RX(m+n)9	Initial data setting completion	RY(m+n)9	Initial data settings request
RX(m+n)A	Error status flag	RY(m+n)A	Reserved
RX(m+n)B	Remote station is ready	RY(m+n)B	Reserved
RX(m+n)C	Reserved	RY(m+n)C	Reserved
RX(m+n)D	Reserved	RY(m+n)D	Reserved
RX(m+n)E	Reserved	RY(m+n)E	Reserved
RX(m+n)F	Reserved	RY(m+n)F	Reserved

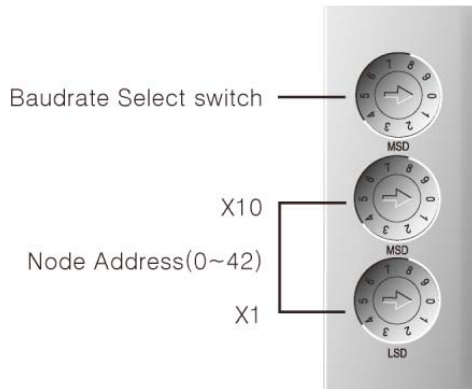
# Network Adapter

## Reaction on network error

RY(m+n)1	RY(m+n)0	Description
0	0	Hold last value
0	1	Clear outputs to zero (Factor default setting)
1	0	Stop the Fn-Bus (Each expansion module reacts according to it's parameter)
1	1	Not used (internally switched to 10)

## CC-Link Setting

### Node Address Setting



- NA-9131 Node address is determined by the node address rotary switch on the front panel of adapter module.
- Set node address is recognized on the power-on of adapter module.

EX) When node address is set as 27 : Device MAC ID Setting :  $(2*10 + 1*7) = 27$

### Baud Rate Select Switch

Baudrate	Rotary Switch Value	
	Fixed Addressing	Auto Addressing
156 Kbps	0	5
625 Kbps	1	6
2.5 Mbps	2	7
5 Mbps	3	8
10 Mbps	4	9

- Fixed Addressing : station 4 occupied
- Auto Addressing : auto setting from 1 to station4 depending on expansion I/O Size

## Mapping Data into the Image Table

