

6.3 Program examples

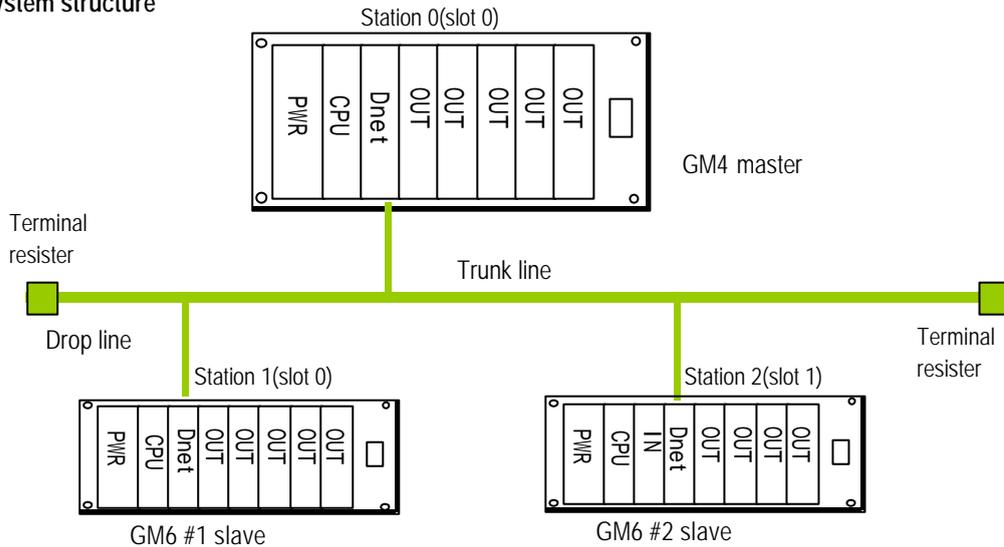
6.3.1 Communication among LGIS' s master module, #1

Example 1

In case sending or receiving individually performed among master and slave module.

Communication module(station 0) on GM4 base slot, communication module(0 station 0) on base slot 0, communication module(station 1) on GM6 #1 slot 0, communication module(station 2) on GM6 #2 slot1 is respectively attached. It is the data sending and receiving program from station 0 to station 1 or station 2. (refer to I/O structure map).

- System structure

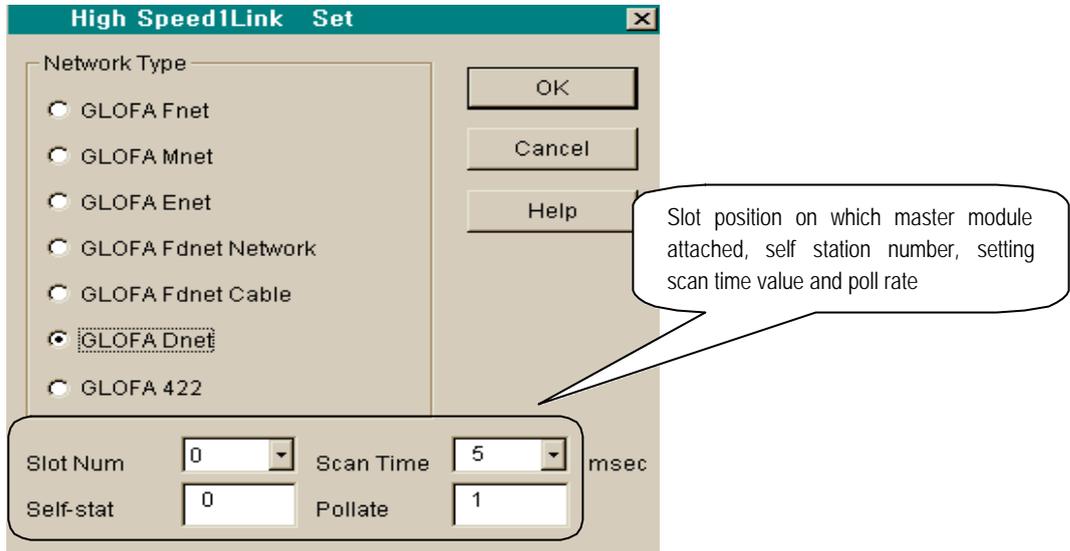


- I/O structure map

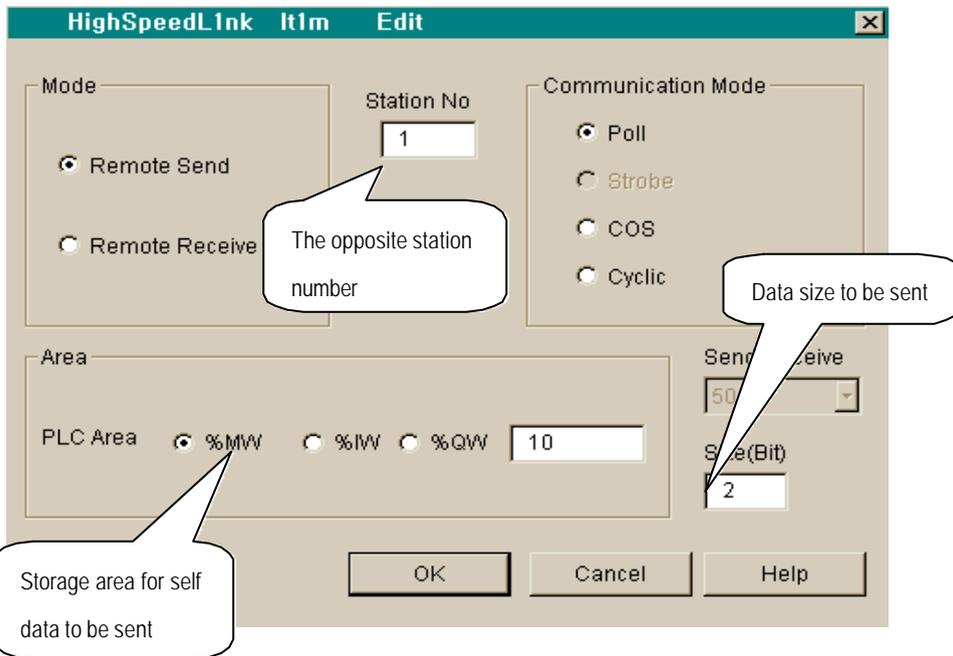
Sending/Receiving structure		Reading area	Storage area	Size(Byte)
GM4(station 0) (Master)	Sending: GM6 station 1	%MW10	-	2
	Receiving:GM6 station 2	-	%QW0.1.0	6
GM6(Station 1) (Slave)	Receiving:GM4 station 0	-	%QW0.1.0	2
GM6(station2) (Slave)	Sending:GM4 station 0	%MW50	-	6

1) Setting of *high speed link* parameter on GM4(Station 0)

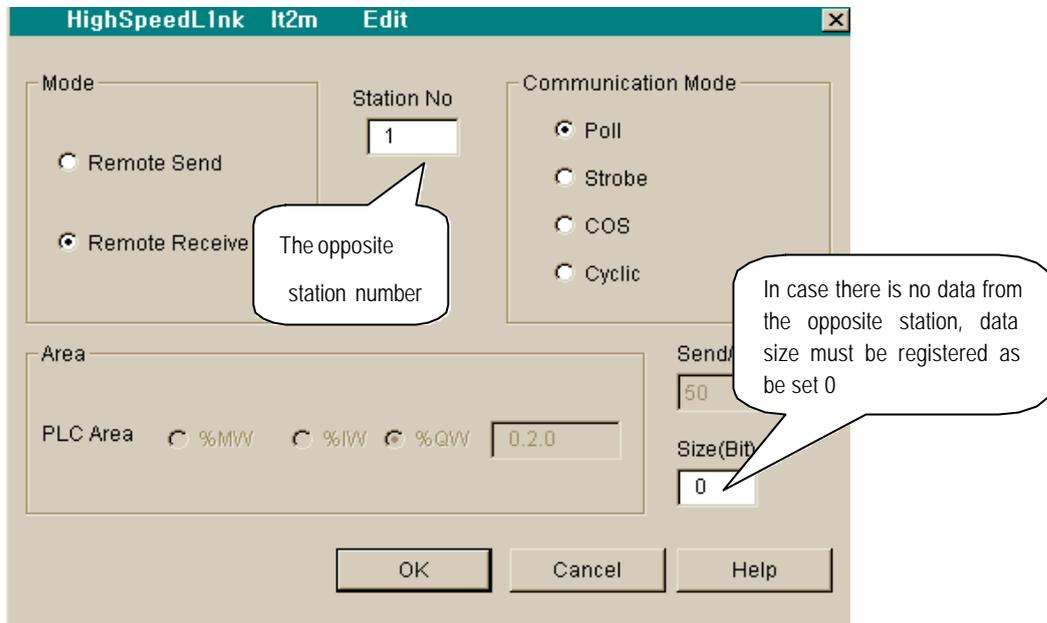
- Setting 'Link set' on master module



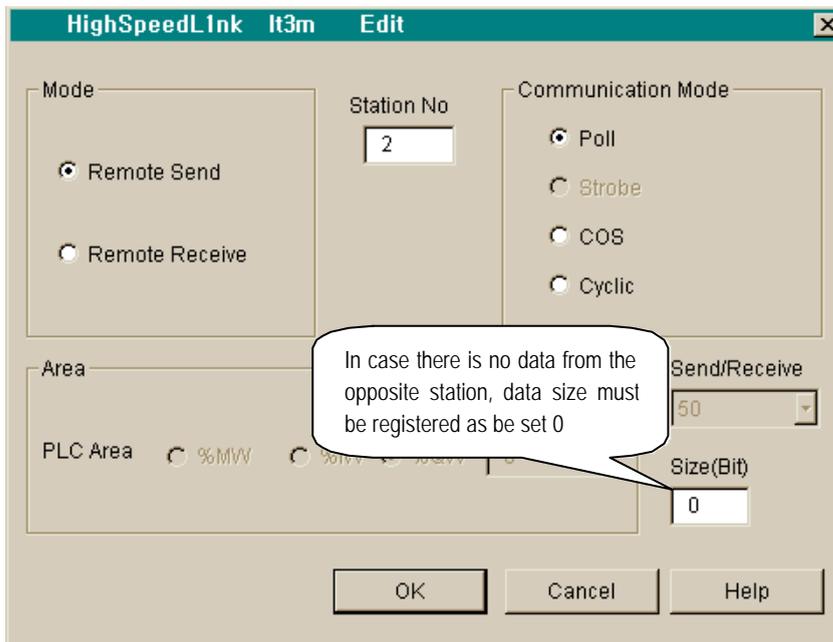
- Setting of parameter for sending to GM6 station 6



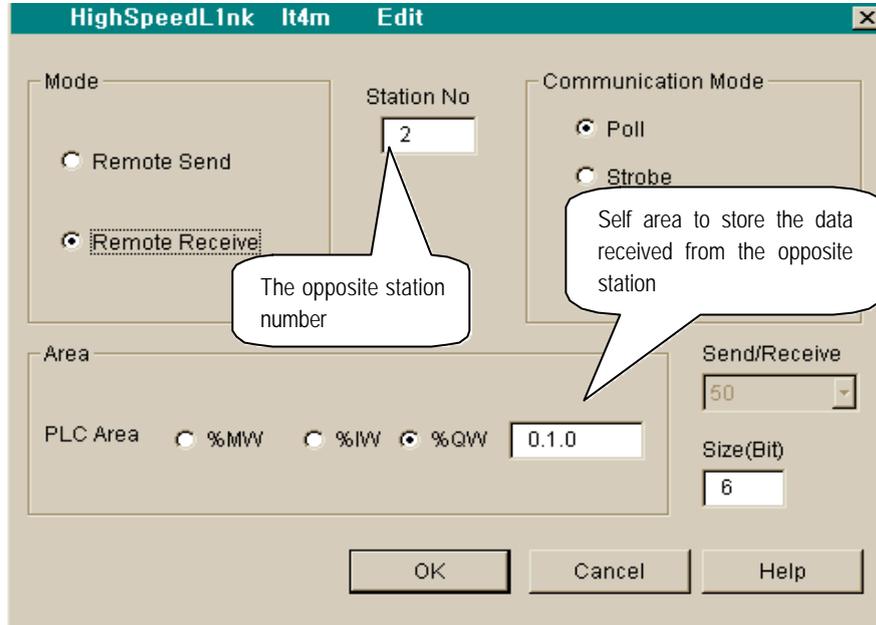
- Setting receiving parameter from GM6 station 1



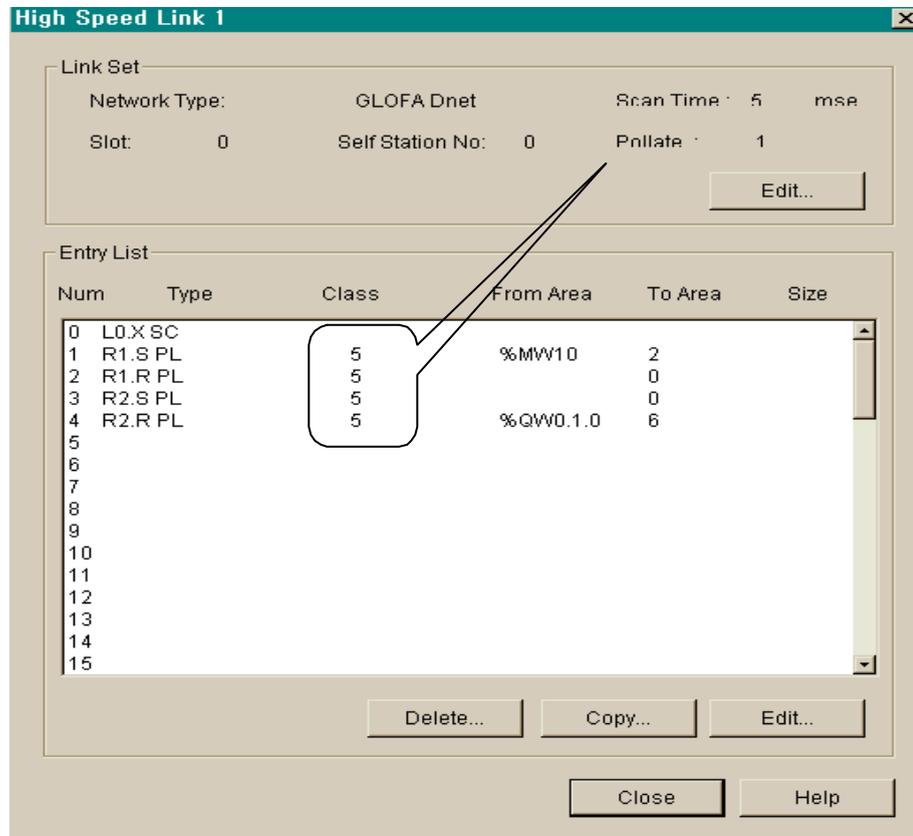
- Setting parameter for sending to GM6 station 2



- Setting parameter for sending to GM6 station 2

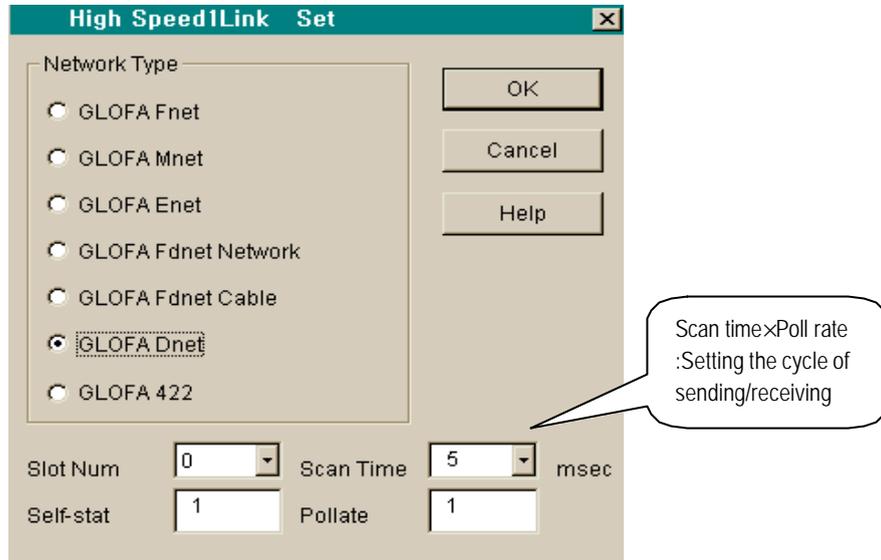


- Display of finished setting ' high speed link 1' on master module

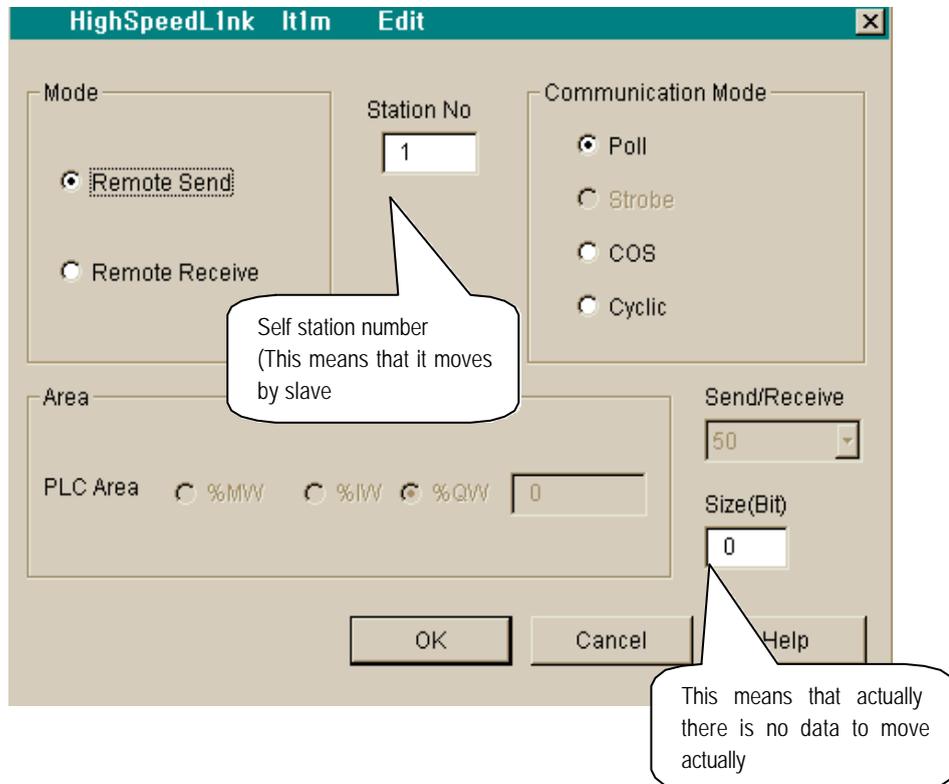


2) Setting *high speed link* parameter on GM6 #1(station 1)

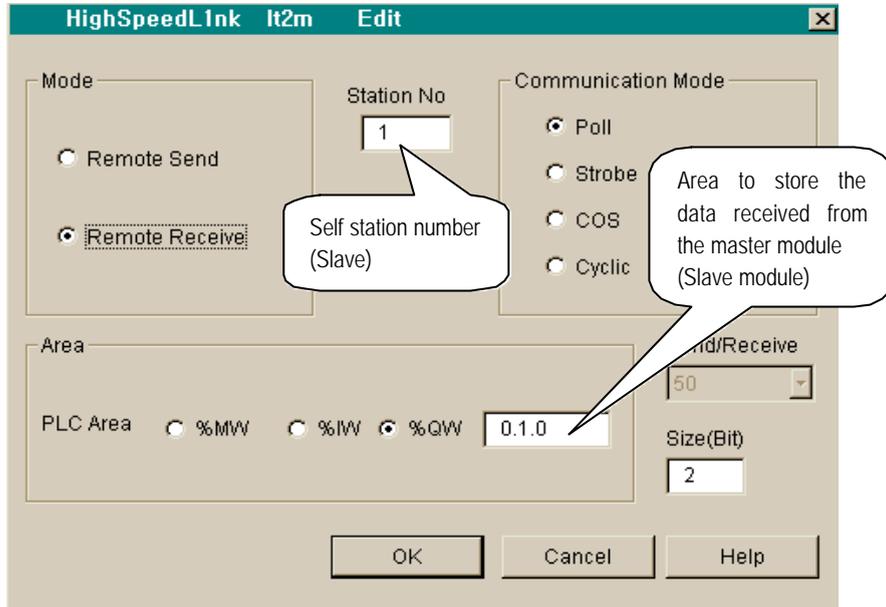
- Setting ' Link set' on slave module



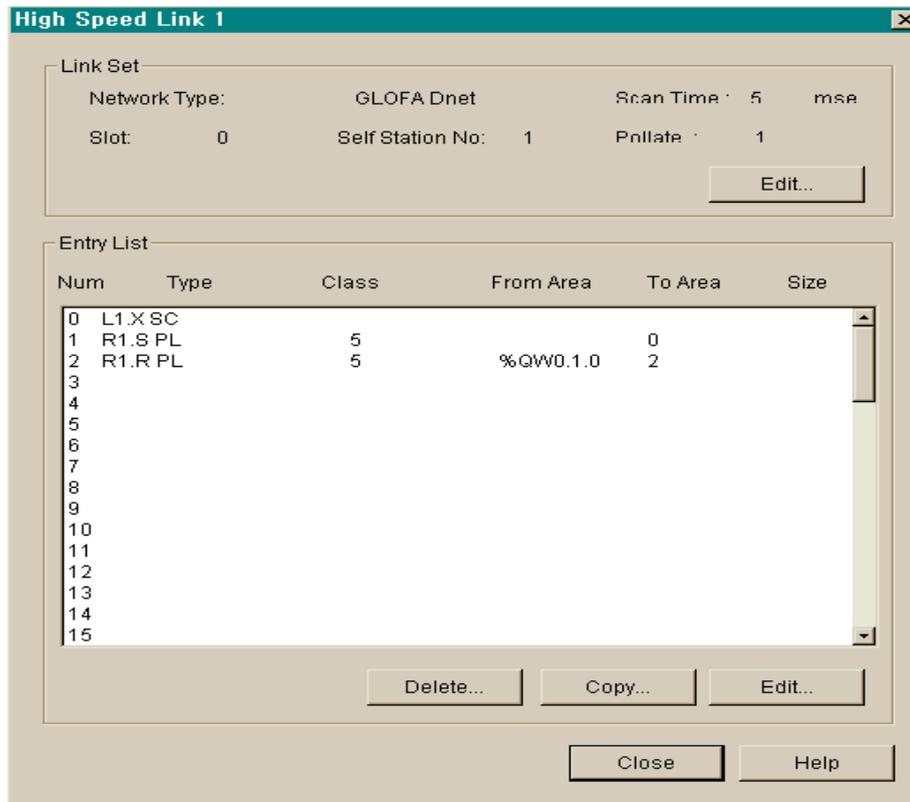
- Setting parameter for sending to GM4 master station



- Setting parameter for sending to GM4 master station

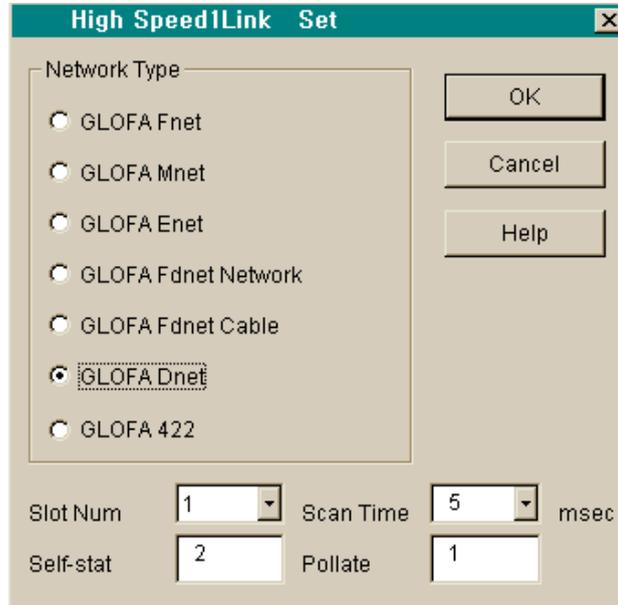


- Display of finished setting 'high speed link 1' on slave module

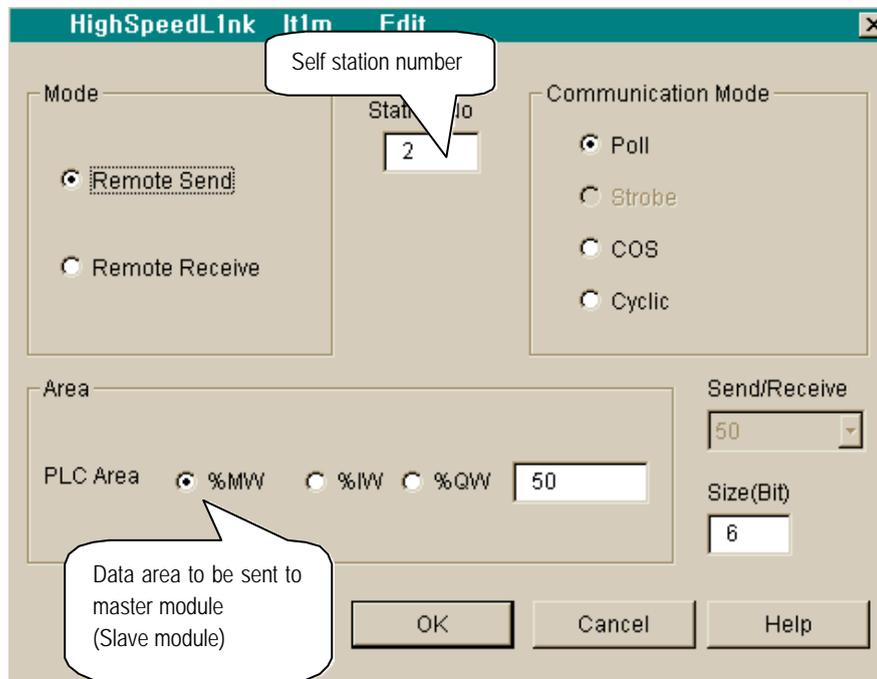


3) Setting parameter for *high speed link* on GM6 #2(station 2)

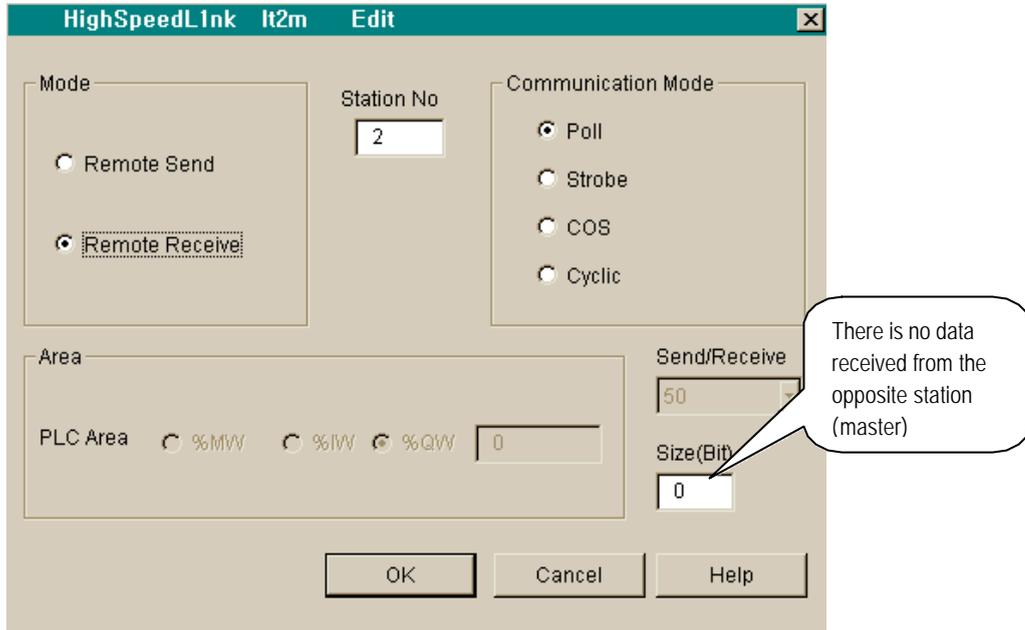
- Setting ' link set on slave module



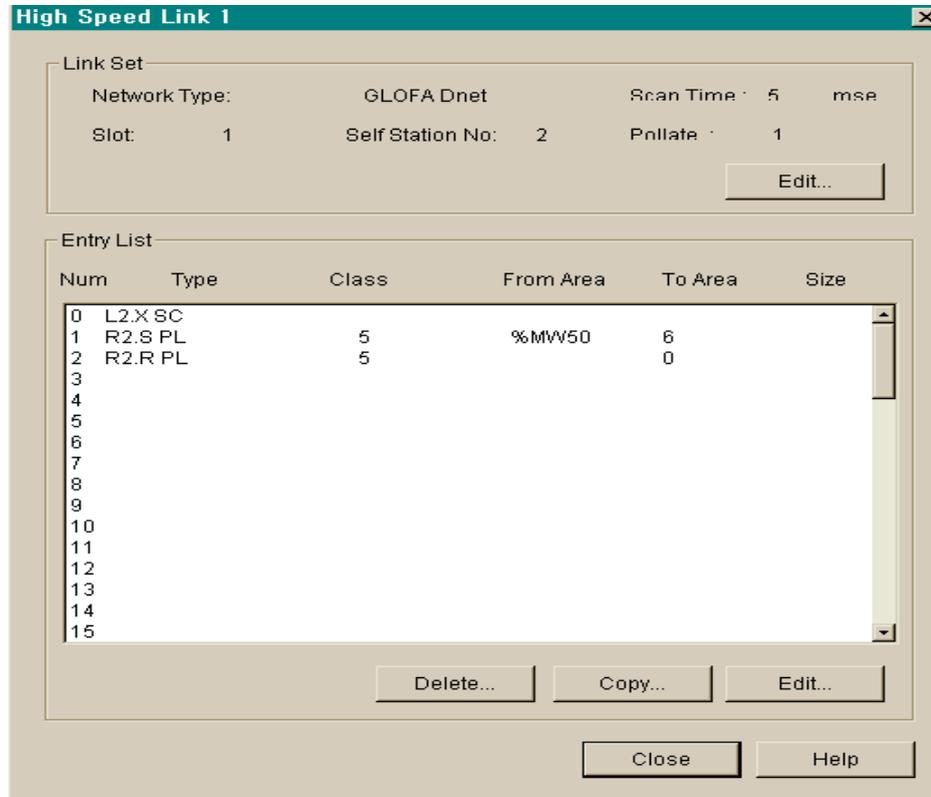
- Setting parameter for sending to GM4 master station



- Setting parameter for sending to GM4 master station



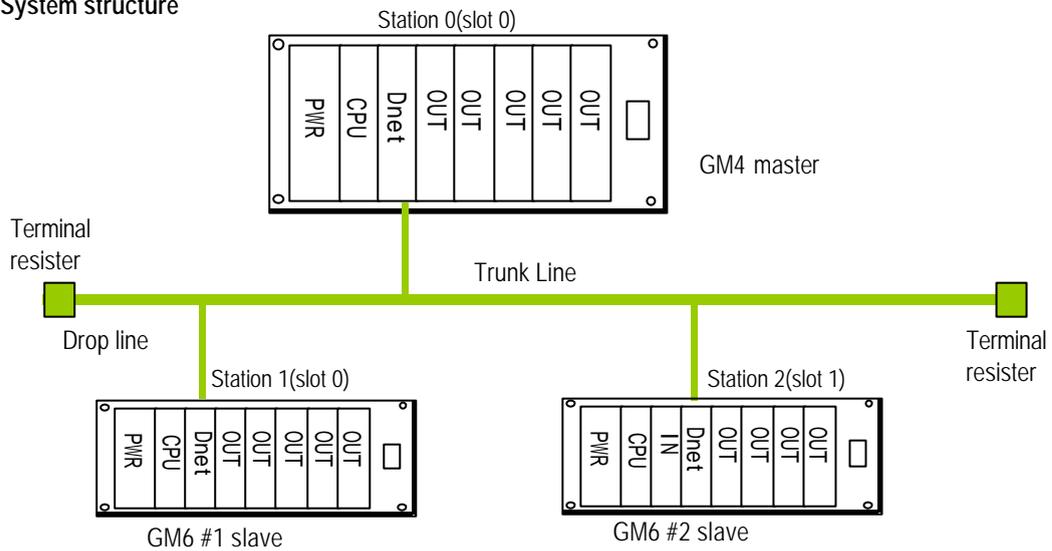
- Display finished setting 'highspeedlink 1' on slave module



6.3.2 Communication among LGIS' s master modules, #2

Example 2	In case sending/receiving is performed simultaneously among master and slave module
<p>Communication module(station 0) on GM4 base slot, communication module(0 station 0) on base slot 0, communication module(station 1) on GM6 #1 slot 0, communication module(station 2) on GM6 #2 slot1 is respectively attached. It is the data sending and receiving program from station 0 to station 1 or station 2. (refer to I/O structure map).</p>	

· System structure

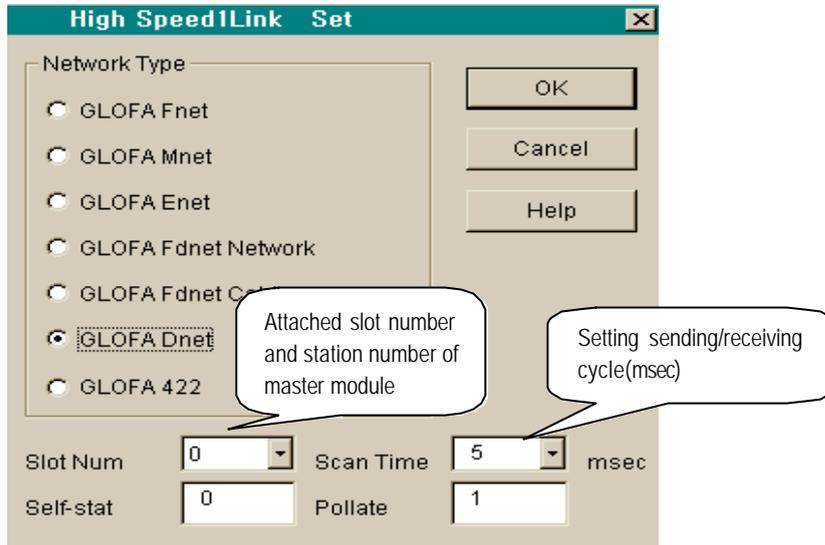


· I/O Structure map

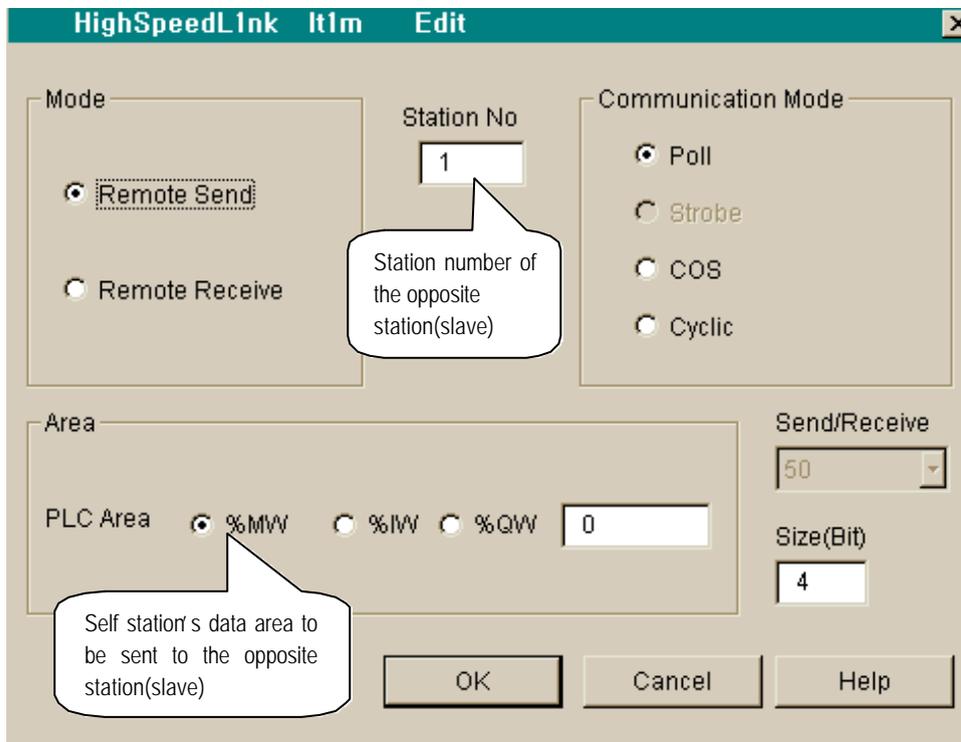
Sending/receiving structure		Reading area	Storage area	Size(Byte)
GM4(station0) (master)	Sending:GM6 station1	%MW0	-	4
	Receiving:GM6 station 1	-	%QW0.1.0	2
	Sending:GM6 station 2	%MW0	-	8
	Receiving:GM6 station 2	-	%QW0.2.0	2
GM6(station1) (slave)	Sending:GM4 station 0	%MW100	-	2
	Receiving:GM4 station 0	-	%QW0.1.0	4
GM6(station2) (Slave)	Sending:GM4 station 0	%MW200	-	2
	Receiving:GM4 station 0	-	%QW0.2.0	8

1) Setting parameter of 'high speed link' on GM4(station 0)

- Setting 'Link set' on master module



- Setting parameter for sending on GM6 station 1



Chapter 6 Communication program

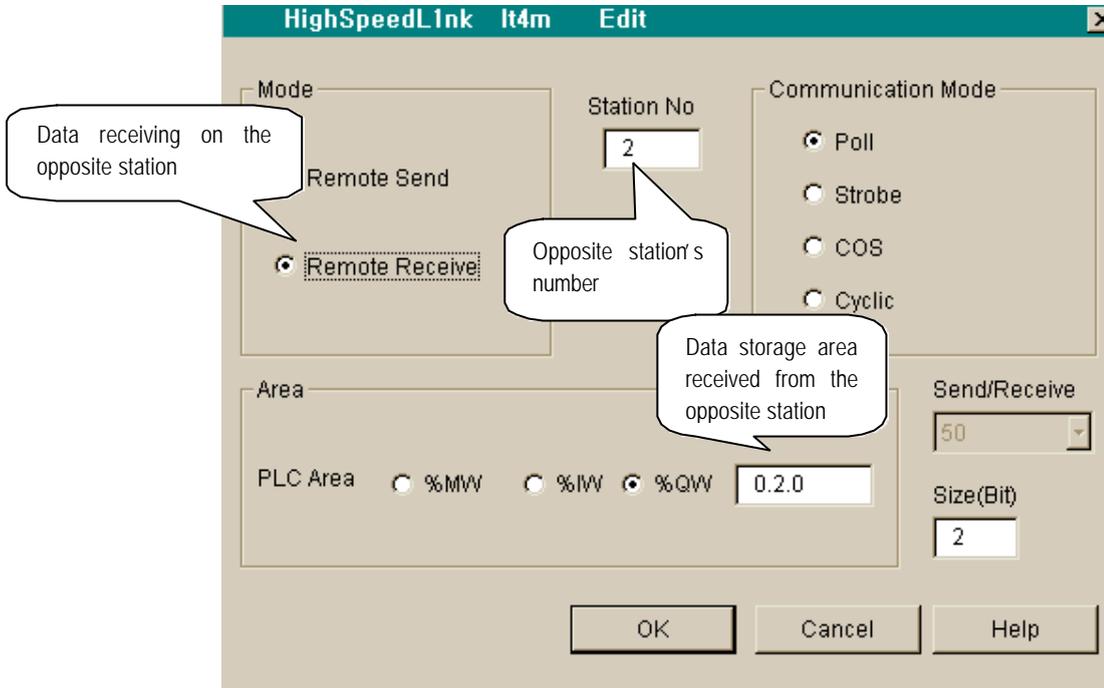
- Setting parameter for receiving GM6 station 1

The screenshot shows the 'HighSpeedLink It2m Edit' dialog box. The 'Mode' section has 'Remote Receive' selected. The 'Station No' field contains '1'. The 'Communication Mode' section has 'Poll' selected. The 'Area' section has '%QW' selected with the value '0.1.0'. The 'Send/Receive' dropdown is set to '50' and the 'Size(Bit)' field is '2'. Callouts explain: 'Station number of the opposite station(slave)' points to the 'Station No' field; 'Data storage area received from the opposite station.' points to the '%QW' selection.

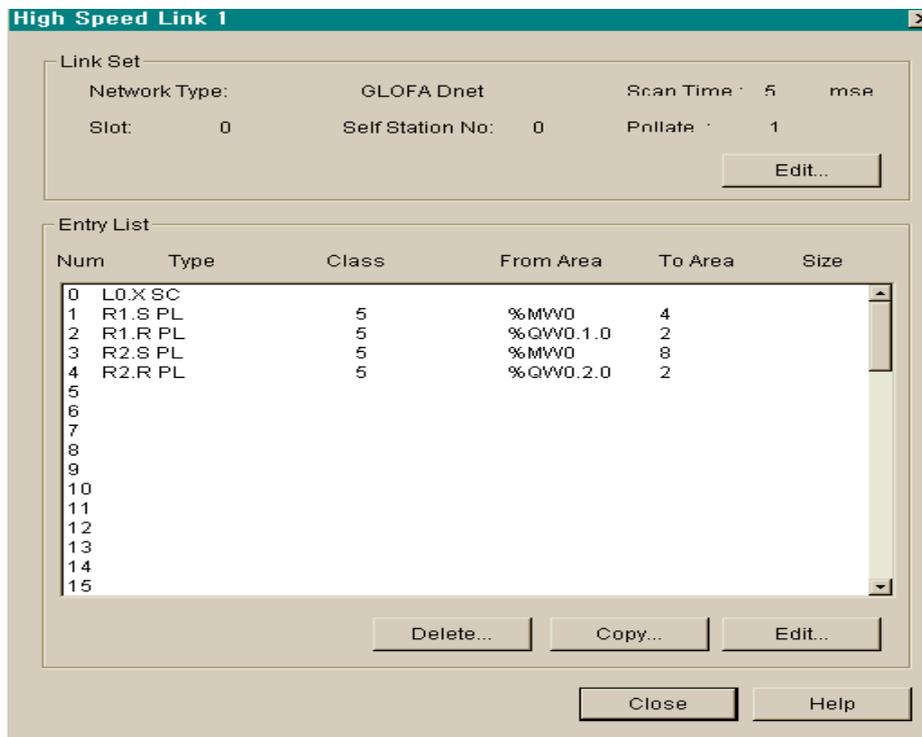
- Setting parameter for sending to GM6 station 2

The screenshot shows the 'HighSpeedLink It3m Edit' dialog box. The 'Mode' section has 'Remote Send' selected. The 'Station No' field contains '2'. The 'Communication Mode' section has 'Poll' selected. The 'Area' section has '%MW' selected with the value '0'. The 'Send/Receive' dropdown is set to '50' and the 'Size(Bit)' field is '8'. Callouts explain: 'The opposite station's number the data to be sent' points to the 'Station No' field; 'Self station's data area to be sent to the opposite station' points to the '%MW' selection; 'Data size to be sent' points to the 'Size(Bit)' field.

- Setting parameter for sending on GM6 station 2

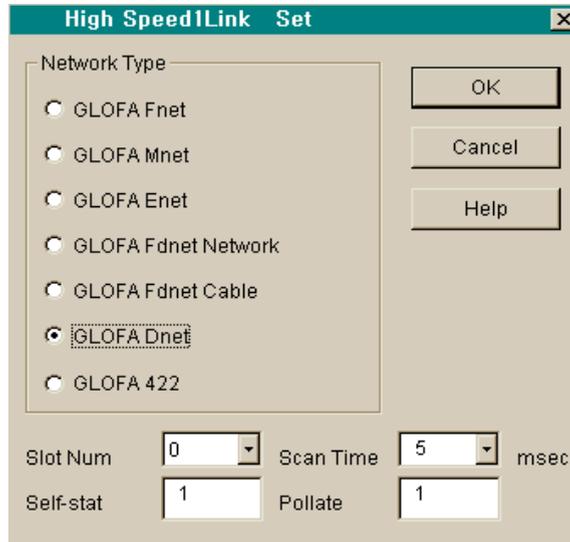


- Display of finished setting *high speed link* on Master module



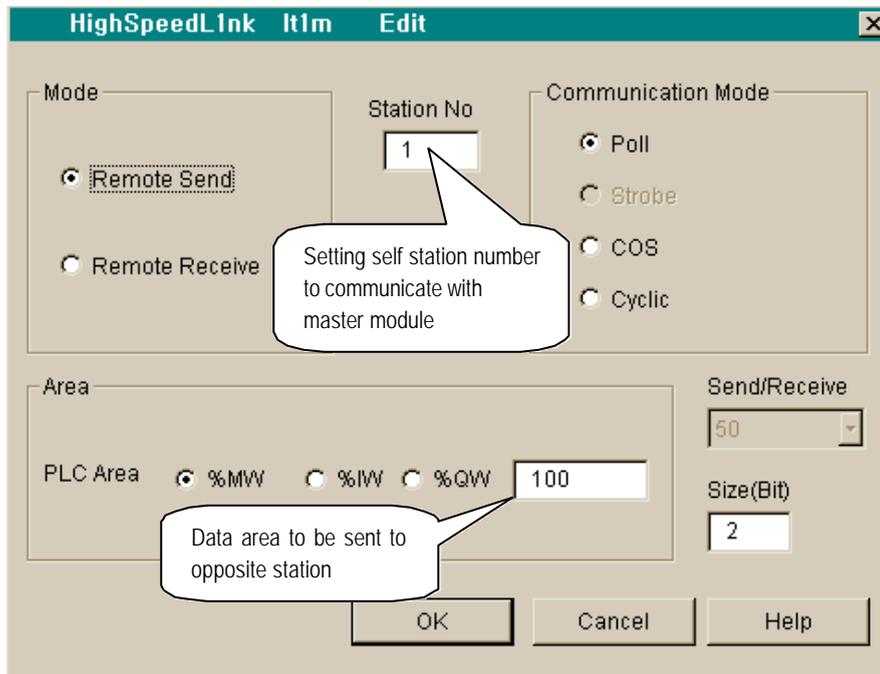
2) Setting parameter for *high speed link* on GM6 #1(station 1)

- Setting 'link information' on slave module



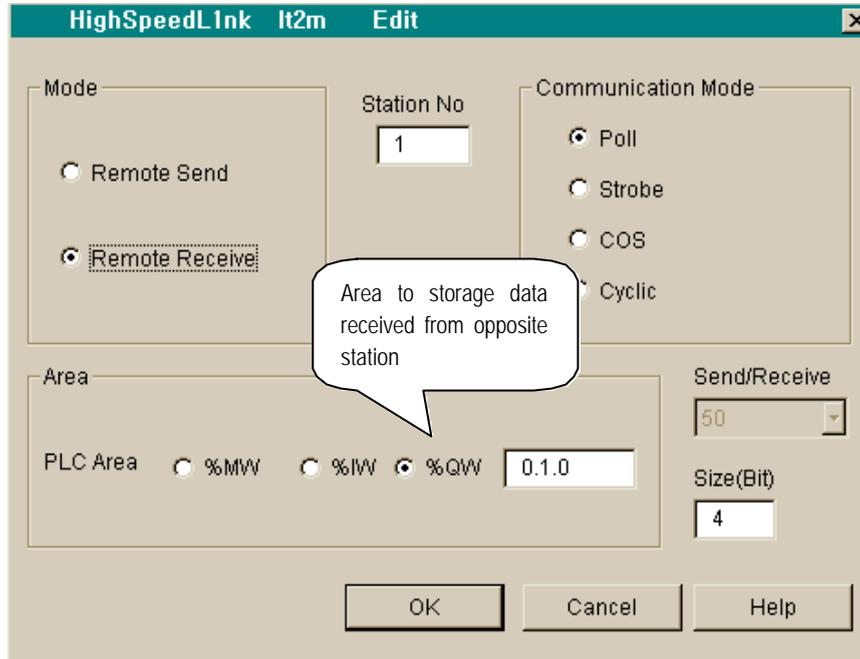
The 'High SpeedLink Set' dialog box is shown. It features a 'Network Type' section with radio buttons for GLOFA Fnet, GLOFA Mnet, GLOFA Enet, GLOFA Fdnet Network, GLOFA Fdnet Cable, GLOFA Dnet (selected), and GLOFA 422. Below this are input fields for Slot Num (0), Scan Time (5) msec, Self-stat (1), and Pollate (1). Buttons for OK, Cancel, and Help are on the right.

- Setting parameter of sending to GM4 master station

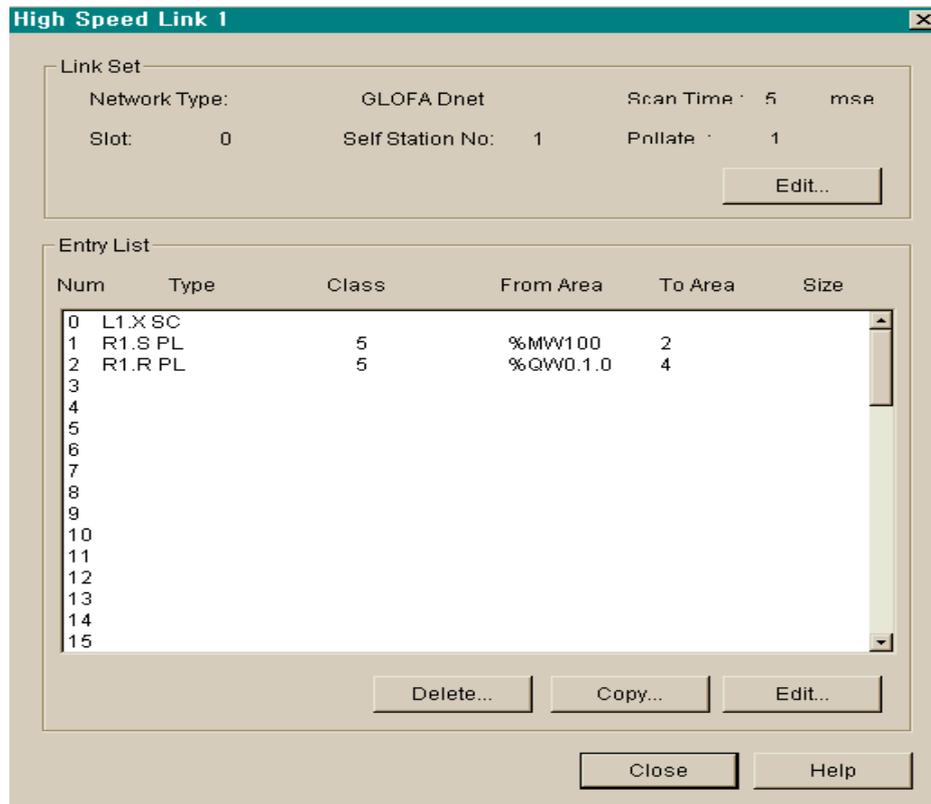


The 'HighSpeedLink It1m Edit' dialog box is shown. It has three main sections: 'Mode' with radio buttons for Remote Send (selected) and Remote Receive; 'Station No' with a text box containing '1'; and 'Communication Mode' with radio buttons for Poll (selected), Strobe, COS, and Cyclic. The 'Area' section includes PLC Area radio buttons for %MW (selected), %IW, and %QW, and a text box containing '100'. The 'Send/Receive' section has a dropdown menu set to '50' and a 'Size(Bit)' text box set to '2'. Buttons for OK, Cancel, and Help are at the bottom. Two callout boxes provide context: one points to the 'Station No' field with the text 'Setting self station number to communicate with master module', and another points to the '%MW' radio button and '100' text box with the text 'Data area to be sent to opposite station'.

- Setting parameter of receiving to master station

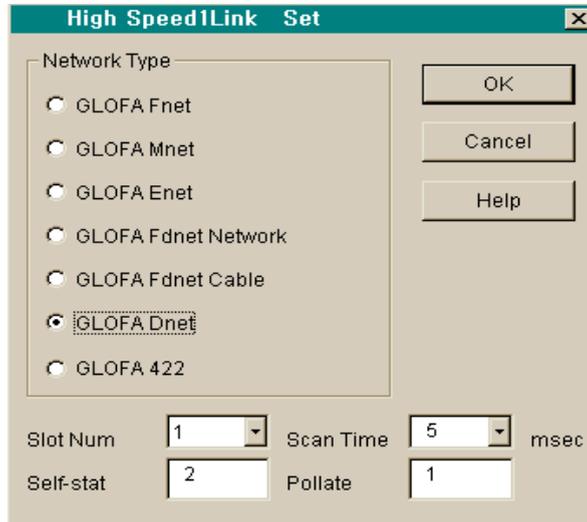


- Display finished setting ' high speed link 1' on slave module



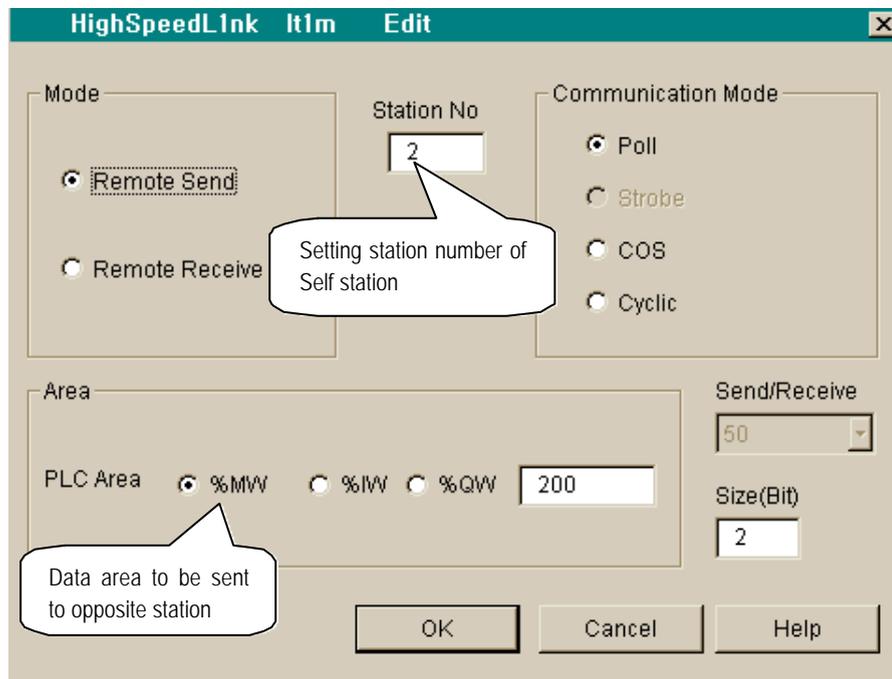
3) Setting of *high speed link* parameter on GM6 #2(station 2)

- Setting 'Link information' on slave module



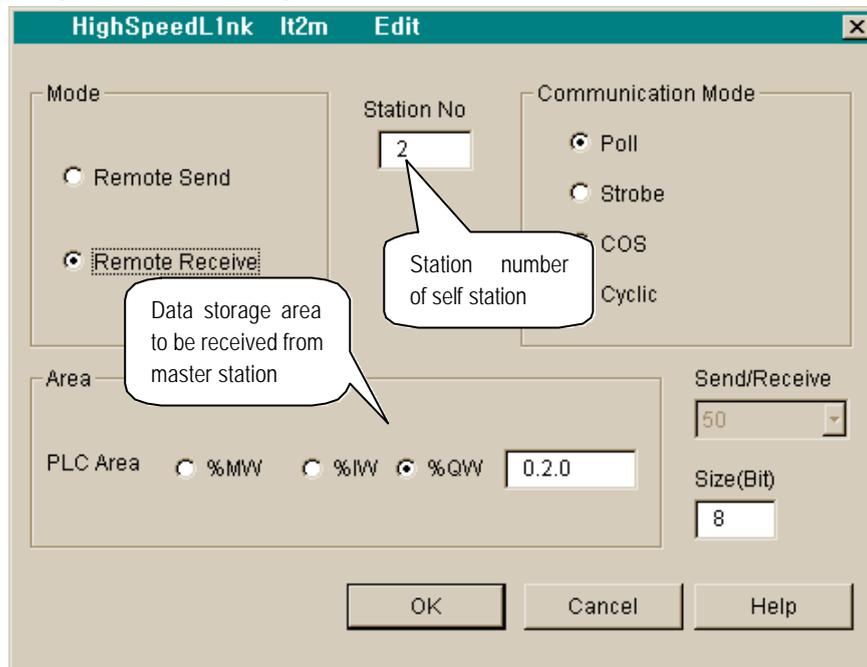
The 'High Speed1Link Set' dialog box is used to configure network parameters. It features a 'Network Type' section with radio buttons for GLOFA Fnet, GLOFA Mnet, GLOFA Enet, GLOFA Fdnet Network, GLOFA Fdnet Cable, GLOFA Dnet (selected), and GLOFA 422. Below this, there are input fields for Slot Num (1), Scan Time (5 msec), Self-stat (2), and Pollate (1). Buttons for OK, Cancel, and Help are located on the right side.

- Setting parameter of sending to GM4 master station

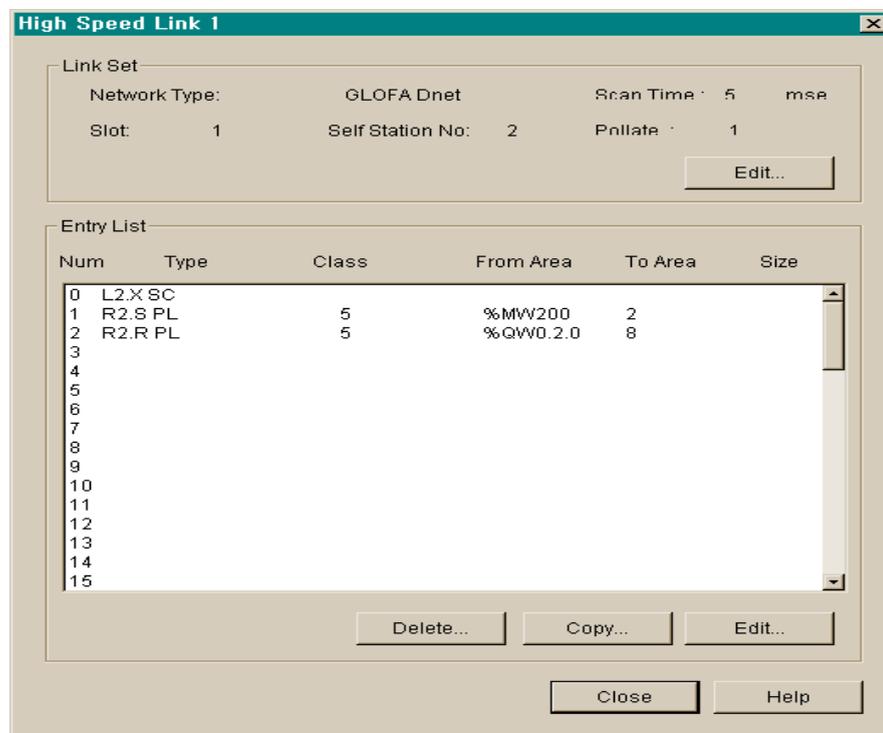


The 'HighSpeedLink It1m Edit' dialog box is used to configure communication parameters. It includes a 'Mode' section with radio buttons for Remote Send (selected) and Remote Receive. A 'Station No' field is set to 2, with a callout bubble stating 'Setting station number of Self station'. The 'Communication Mode' section has radio buttons for Poll (selected), Strobe, COS, and Cyclic. The 'Area' section includes radio buttons for PLC Area (%MW, %IW, %QW) and a text field set to 200, with a callout bubble stating 'Data area to be sent to opposite station'. The 'Send/Receive' field is set to 50 and the 'Size(Bit)' field is set to 2. Buttons for OK, Cancel, and Help are at the bottom.

- Setting parameter of receiving to GM4 master station



- Display of finished parameter 'high speed link 1' on slave module

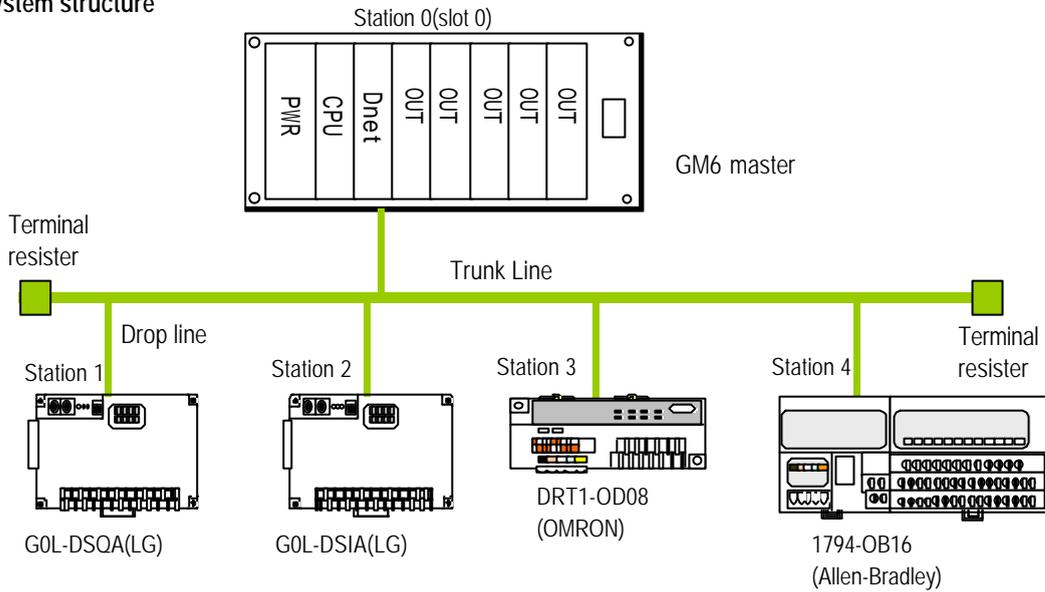


6.3.3 Communication among LGIS' s and other company' s slave modules

Example 3

Communication master module(station 0) on GM6 base slot 0 is attached and send or receive data to single remote modules with station number 1-4(refer to I/O structure map).

· System structure

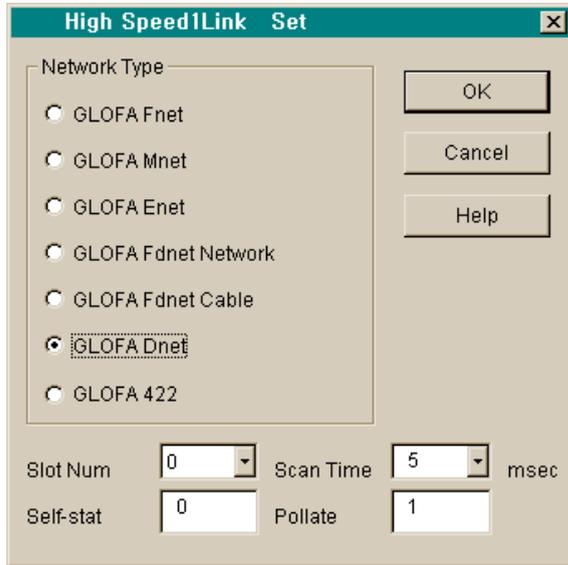


· I/O structure map

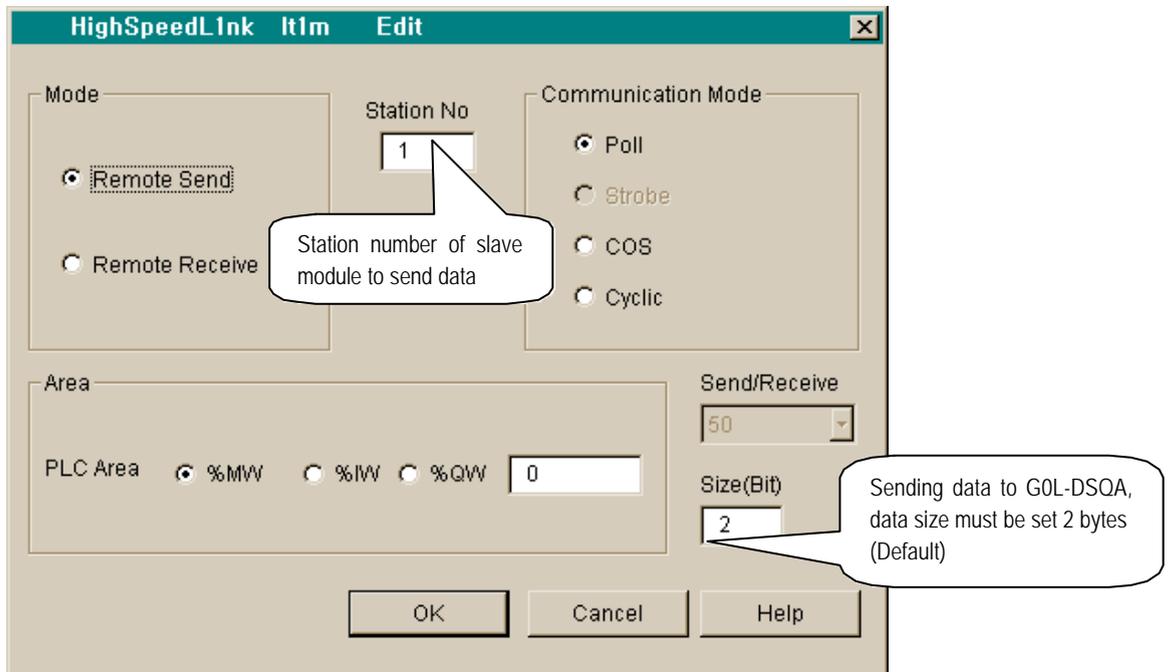
Sending/Receiving structure		Reading area	Storage area	Size(Byte)
GM6(station 0) (master)	Sending:GOL-DSQA(station 1)	%MW0	-	2
	Receiving:GOL-DSIA(station 2)	-	%QW0.1.0	2
	Sending:DRT1-OD08(station 3)	%MW100	-	1
	Sending:1794-OB16(station 4)	%MW200	-	4

1) Setting of *high speed link* parameter on GM6(station 0)

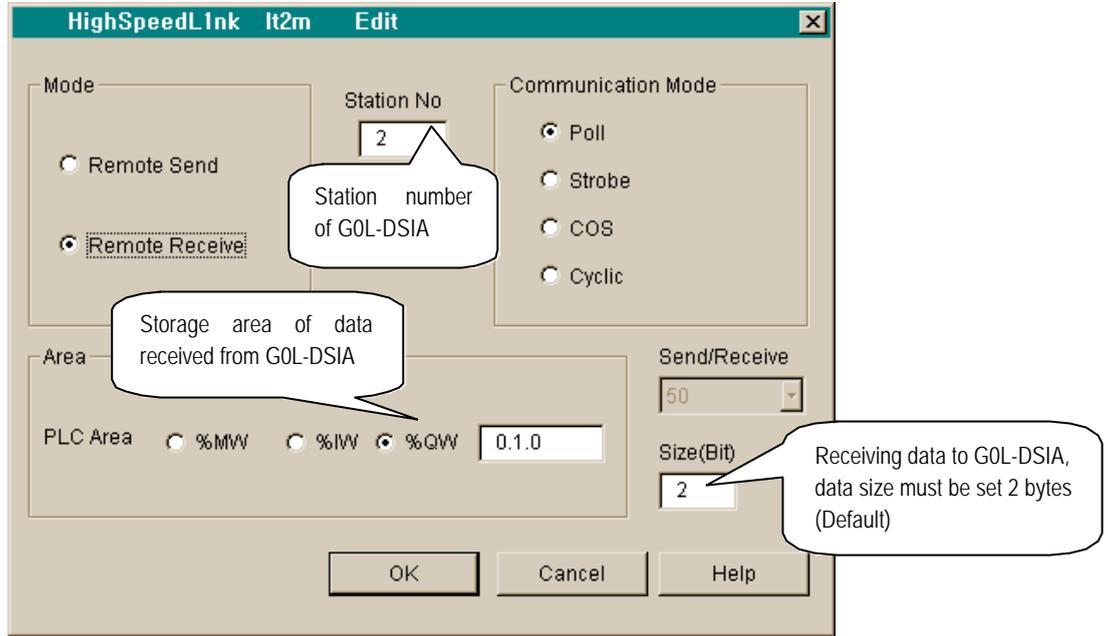
- Setting of 'Link information' on master module



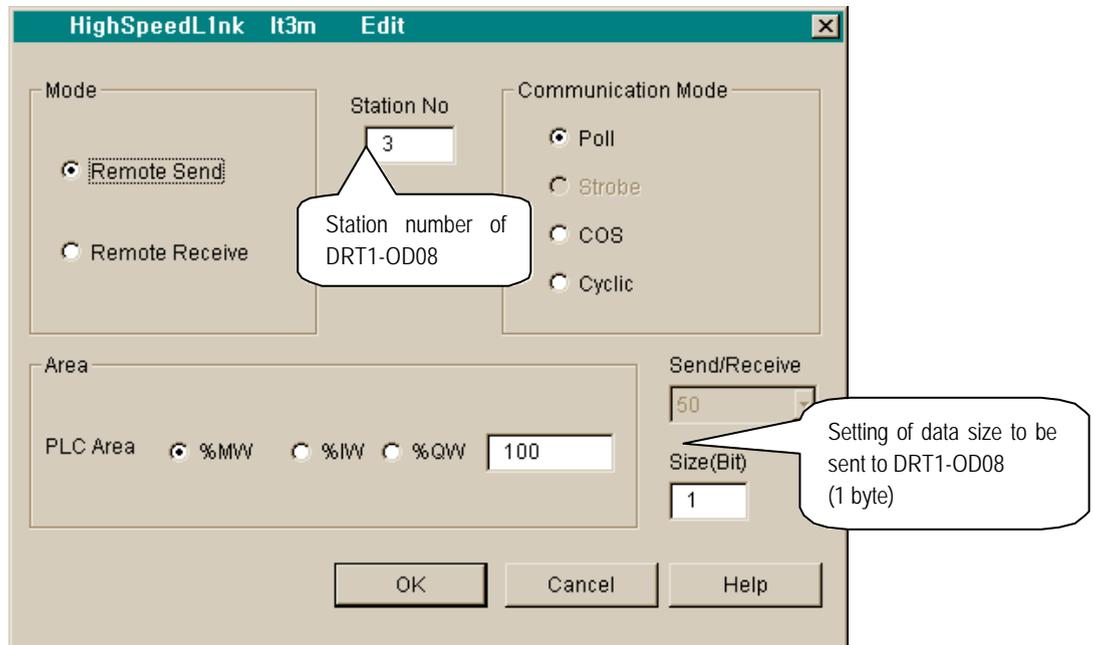
- Setting of sending parameter to station 1(GOL-DSQA)



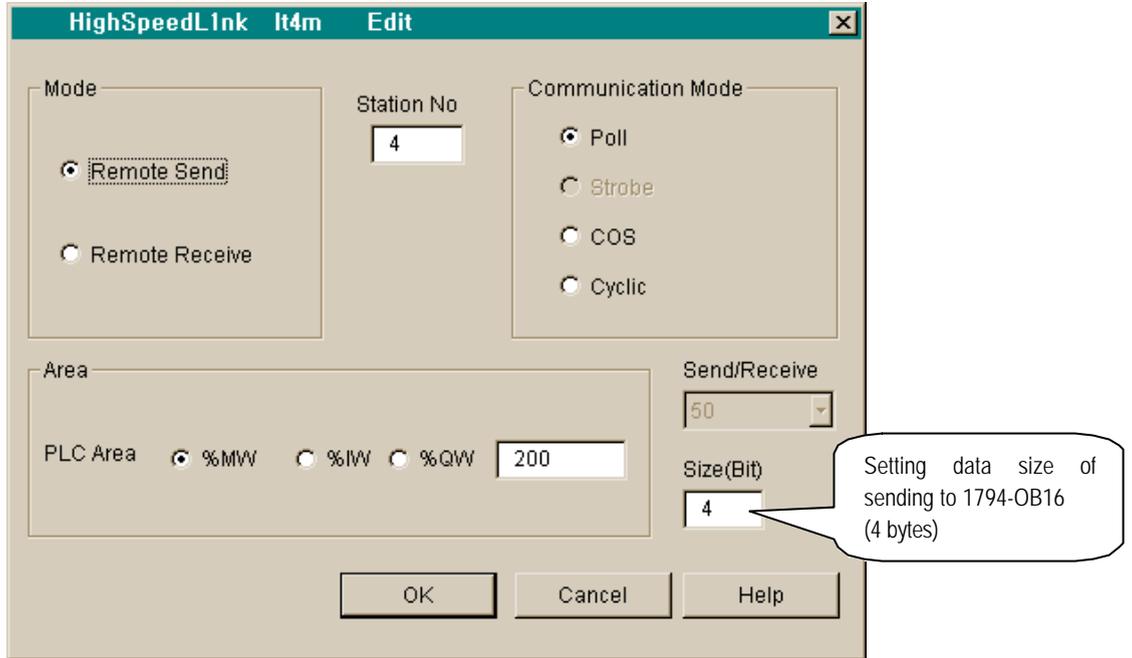
- Setting of receiving parameter to station 2(G0L-DSIA)



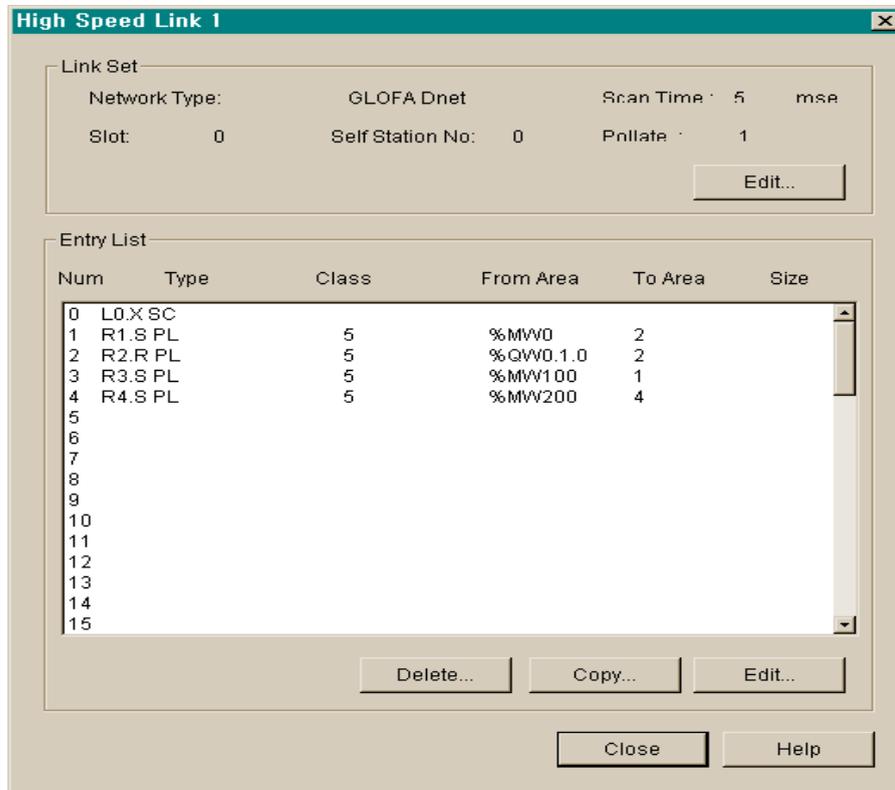
- Setting of sending parameter to station 3(DRT1-OD08)



- Setting of sending parameter to station 4(1794-OB16)



- Display of finished setting ' high speed link 1' on master module



- 2) Setting of *High speed link* parameter on single type remote(station 1)
: No parameter setting
- 3) Setting of *High speed link* parameter on single type remote(station 2)
: No parameter setting
- 4) Setting of *High speed link* parameter on single type remote(station 3)
: No parameter setting
- 5) Setting of *High speed link* parameter on single type remote(station 4)
: No parameter setting

Remark

- 1) Single type slave(remote) module is not needed additional parameter setting but just only with it s own station number and Communication it s possible to communicate with master.