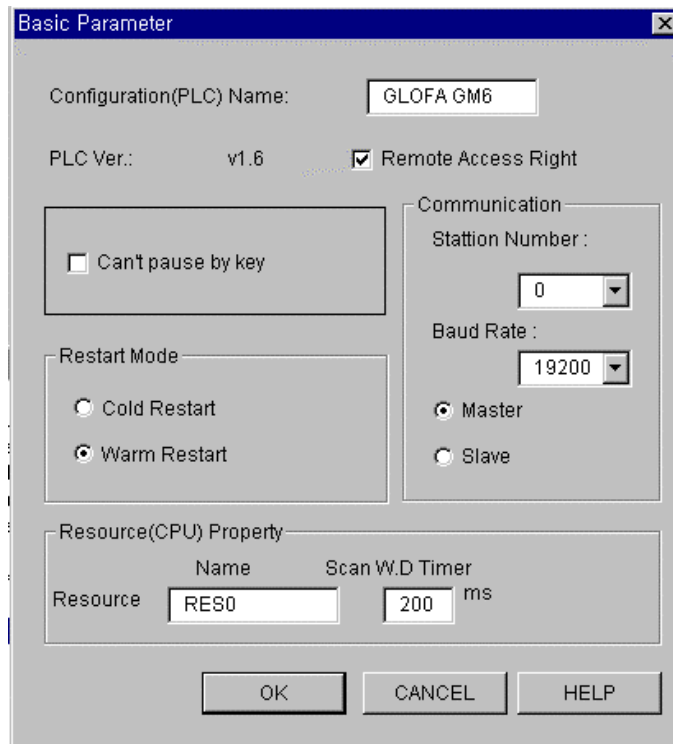# Appendix 1. System Definitions

1) Basic Parameters

The basic parameters are necessary for operation of the PLC and used to allocate memory, set the restart mode and set the scan watch dog time, etc.

(1) Configuration (PLC) Name

- It is a representative name for the PLC system. It is used to designate this PLC system when a network system is configured using communication modules.

(2) Enabling/Disabling the control of the PLC via communications

- This parameter is used to enable or disable the remote control of this PLC system through the FAM or computer link module, etc. except for the GMWIN. If this parameter has been set to enable, change of the operation mode and download of programs are available via communications.

(3) Restart Mode

- This parameter is used to set the restart mode in the PLC system. When the system re-starts, one of the 'cold restart' or 'warm restart' is selected in compliance with the parameter setting.

(4) Resource (CPU) Name

- Resource Name is the name that each CPU module configuring the PLC has. When configuring a network system the name is used to designate each CPU module that is used the system.

- Only one CPU module can be mounted in the GM3/4 series, therefore, only the resource 0 is valid.

(5) Scan Watch Dog Time

- This parameter is used to set the maximum allowable execution time of an user program in order to supervisor its normal or abnormal operation.

- Only one CPU module can be mounted in the GM3/4 series, therefore, scan watch dog is valid to only the resource 0.

(6) Unable to Pause by mode setting switch

- Set : When switch mode is changed from run to pause/remote (RUN → PAU/REM),

  PLC is operated as Local Pause mode.

- Default (do not set) : When switch mode is changed from run to pause/remote (RUN → PAU/REM),

   PLC is operated as Remote RUN mode.

2) I/O Configuration Parameters

These parameters are used to set the configuration of a system that will be operated. They set the modules that will be mounted and operated onto their own slot in the base unit. If a parameter that has been set and the real mounted module are different, the operation will not be executed. When writing a new project I/O configuration parameters will be all set to default (DEF_MODULE).

If I/O configuration parameters are set to default, the operation starts on the basis of the configuration of the real mounted module when the power is applied. Therefore, though a power failure had occurred during normal operation or the system configuration had been changed due to slip-out of a mounted module, operation starts and continues when the power has been re-applied because the system considers that it is a normal operation state. To prevent this error, be sure to set correctly the I/O configuration parameters complying with the real modules that shall be mounted and operated.

<I/O Parameters Setting List>
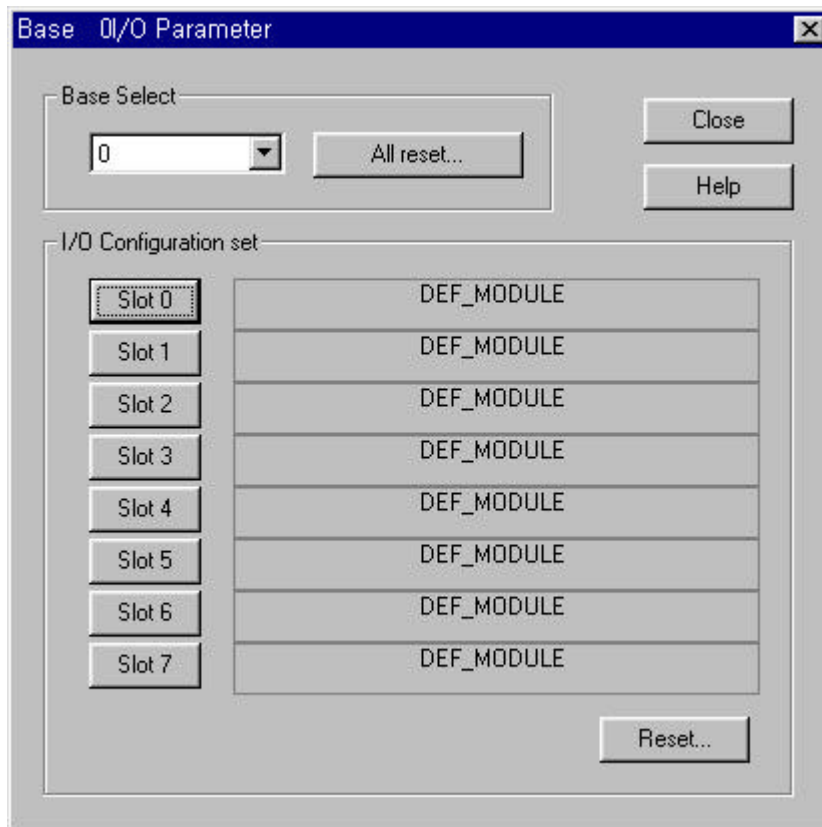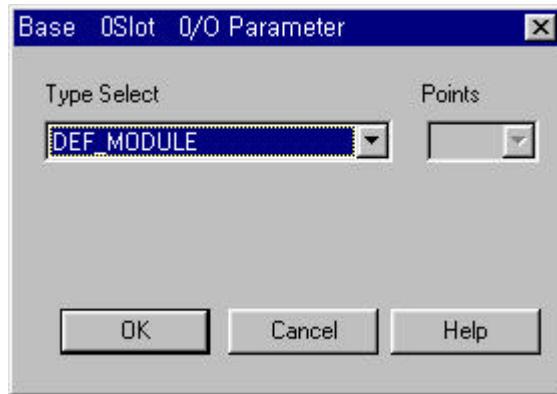
| Keywords	Description	Applicable Modules
DC input	DC input module	G6I-D22A(16 points), G6I-D24A(32 points), G6I-D22B(16 points) G6I-D24B(32 points)
110 VAC input	110 VAC input module	G6I-A11A(8 points)
220 VAC input	220 VAC input module	G6I-A21A(8 points)
Relay output	Relay output module	G6Q-RY2A(16 points)
SSR output	Triac output module	G6Q-SS1A(8 points)
TR output	Transistor output	G6Q-TR2A(16 points), G6Q-TR4A(32 points)
A/D	A/D conversion module	G6F-AD2A(4 channels)
DAV, DAI	D/A conversion module	G6F-DA2V(4channels, voltage type) G6F-DA2I(4channels, current type)
HSC	High speed counting module	G6F-HSCA(1 channels)
GLOFA Fnet	Fnet I/F module	G6L-FUEA
GLOFA Cnet	Cnet I/F module	G6L-CUEB, G6I-CUEC
DEF_I	All input modules	G6I-D22A(16 points), G6I-D24A(32 points), G6I-D22B(16 points) G6I-D24B(32 points), G6I-A11A(8 points), G6I-A21A(8 points)
DEF_O	All output modules	G6Q-RY2A(16 points), G6Q-SS1A(8 points), G6Q-TR2A(16 points), G6Q-TR4A(32 points)
DEF_IO	All mixed I/O modules	-
DEF_SP	All communications / special modules	• All special modules • All communications modules
DEF_MODULE	All modules	• All input modules • All output modules • All mixed I/O modules • All special modules • All communications modules
DEF_EMPTY	Empty slot	–

3) Communications Parameters

These high speed link parameters are used to set the opposite station for data communications, data and communications cycle when communicating a defined data repeatedly through communication modules.

(For detailed descriptions, refer to the User's Manual relating to data communications)
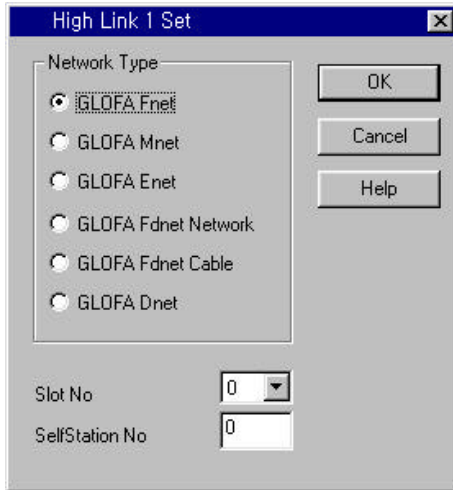
(1) Network type : Used to set the type of the communications module

(2) Slot No. : Location number of slot where the communications module has been mounted.

(3) Local No. : Local number of the module which executes high speed link communications.
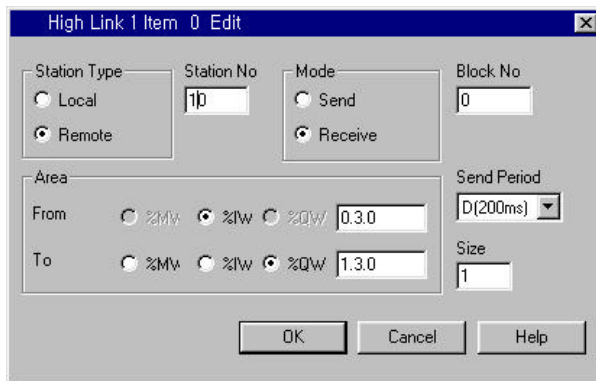
(1) Station type : Type of the communications module in the opposite station. Local or remote will be set.

(2) Station No. : Used to indicate the station that has invoked data during communications.

(3) Mode : Used to set the communications mode to Send or Receive.

(4) Block No. : Designating number for identification of a data block in the same communications module.

(5) Data communications cycle : Used to set the cycle of sending and receiving of data.

(6) Area: I, Q and M areas should be set by the decimal number or word.

(7) Size : Number of words that will be sent and received.