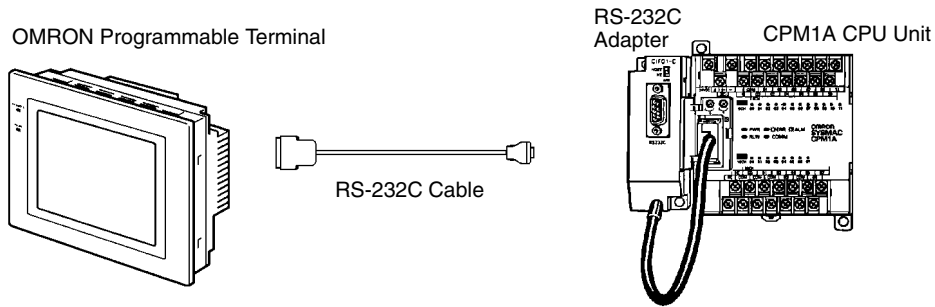


CPM1A PCs



PC Setup Settings

The settings relating to 1:1 NT Link PC communications must be set as shown in the following table.

Word	Bit	Function	Setting
DM 6650	00 to 07	Port settings ¹ 00: Standard (1 start bit, 7-bit data, 2 stop bits, even parity, 9,600 bps) 01: Settings in DM 6651	00 (Any value is OK)
	08 to 11	Link area for 1:1 PC Link via peripheral port 0: LR 00 to LR 15	0 (Any value is OK)
	12 to 15	Communications mode ¹ 0: Host Link; 2: 1:1 PC Link Slave; 3: 1:1 PC Link Master; 4: 1:1 NT Link	4

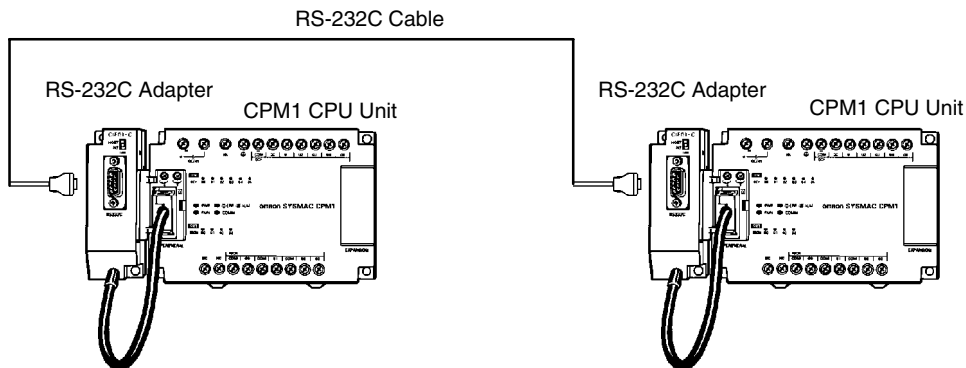
- Note**
1. If an improper setting is used, a non-fatal error will occur, AR 1302 will be turned ON, and the default setting (0 or 00) will be used.
 2. For information on the NT Link settings for another OMRON PC, refer to that PC's Operation Manual.
 3. If an out-of-range value is set, the following communications conditions will result. In that case, reset the value so that it is within the permissible range.
 - Communications mode: Host Link
 - Communications format: Standard settings
(1 start bit, 7-bit data; 2 stop bits, even parity, 9,600 bps)
 - Transmission delay: No
 - Node number: 00

4-2-3 One-to-one PC Link Communications

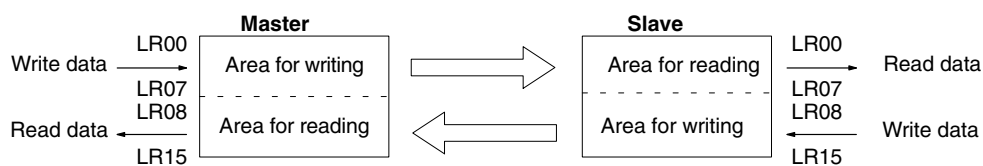
In a 1:1 PC Link, a CPM1/CPM1A is linked to another CPM1/CPM1A, CPM2A/CPM2C, CQM1, C200HX/HG/HE, or C200HS PC through an RS-232C Adapter and standard RS-232C cable. One of the PCs will serve as the Master and the other as the Slave. The 1:1 PC Link can connect up to 256 bits (LR 0000 to LR 1515) in the two PCs.

CPM1/CPM1A One-to-one PC Links

The following diagram shows a 1:1 PC Link between two CPM1s PCs. Refer to the *CPM1A Operation Manual* for the corresponding information on the CPM1A.



The words used for the 1:1 PC Link are as shown below.



Limitations of 1:1 PC Links with a CPM1/CPM1A

Only the 16 LR words from LR 00 to LR 15 can be linked in the CPM1/CPM1A, so use only those 16 words in the CQM1 or C200HS when making a 1:1 PC Link with one of those PCs. A 1:1 PC Link cannot be made to a CPM1/CPM1A PC using LR 16 through LR 63 in the CQM1, C200HX/HG/HE, or C200HS.

PC Setup Settings

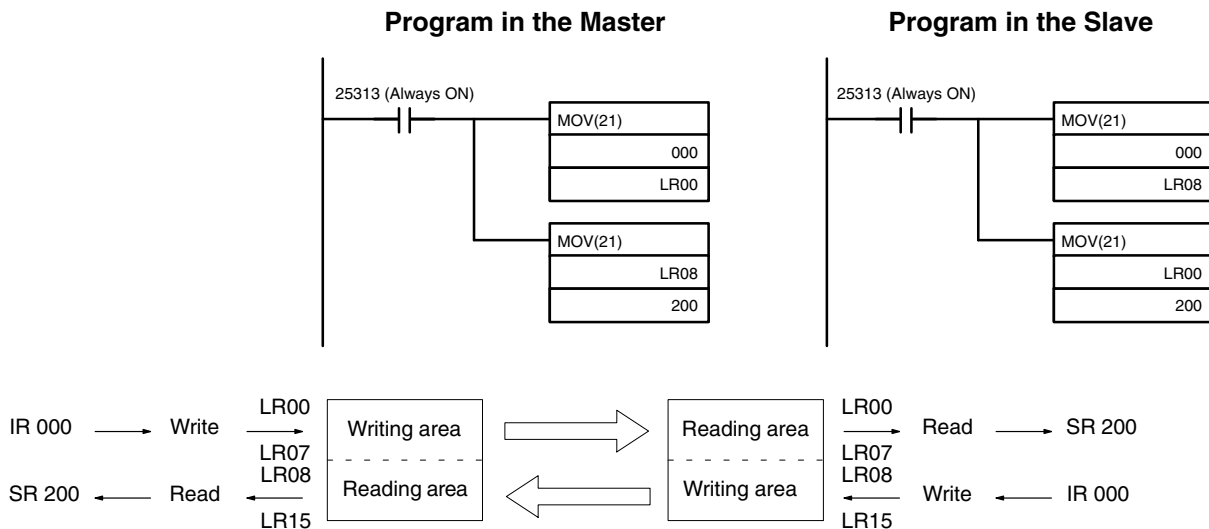
The settings relating to 1:1 PC Link communications must be set as shown in the following table.

Word	Bit	Function	Setting (Master)	Setting (Slave)
DM 6650	00 to 07	Port settings ¹ 00: Standard (1 start bit, 7-bit data, 2 stop bits, even parity, 9,600 bps) 01: Settings in DM 6651	00 (Any value is OK)	00 (Any value is OK)
	08 to 11	Link area for 1:1 PC Link via peripheral port 0: LR 00 to LR 15	0	0 (Any value is OK)
	12 to 15	Communications mode ¹ 0: Host Link; 2: 1:1 PC Link Slave; 3: 1:1 PC Link Master; 4: 1:1 NT Link	3	2

- Note**
1. If an improper setting is used, a non-fatal error will occur, AR 1302 will be turned ON, and the default setting (0 or 00) will be used.
 2. For information on the 1:1 PC Link settings for another OMRON PC, refer to that PC's Operation Manual.
 3. For information on CPM1/CPM1A 1:1 PC Link connections and wiring diagrams refer to 3-4-7 *Host Link Connections* in the *CPM1 Operation Manual* or *CPM1A Operation Manual*. For the SRM1(-V2) refer to 3-4-4 *RS-232C Port Wiring* in the *SRM1 Master Control Unit Operation Manual*.
 4. If an out-of-range value is set, the following communications conditions will result. In that case, reset the value so that it is within the permissible range.
 - Communications mode: Host Link
 - Communications format: Standard settings
(1 start bit, 7-bit data; 2 stop bits, even parity, 9,600 bps)
 - Transmission delay: No
 - Node number: 00

Example Program

This example shows ladder programs that copy the status of IR 000 in each CPM1/CPM1A to SR 200 in the other CPM1/CPM1A.



4-3 CPM2A/CPM2C Communications Functions

This section describes how to use CPM2A/CPM2C (including the CPM2C-S) communications functions. Read this section if you are using Host Link, no-protocol, 1:1 NT Link, or 1:1 PC Link communications.

4-3-1 Host Link Communications

Host Link communications are a conversational-type communications protocol, in which the PC sends responses to commands issued from a host computer and can be used to read or write data in the PC's data areas and control some PC operations. There is no need for a communications program in the PC. Host Link communications can be used through the peripheral port or the CPM2A/CPM2C's RS-232C port.

