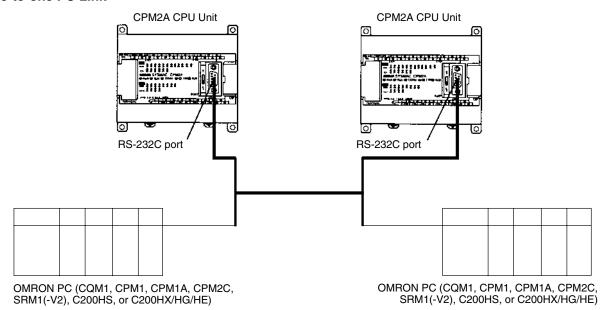
# 4-3-4 One-to-one PC Link Communications

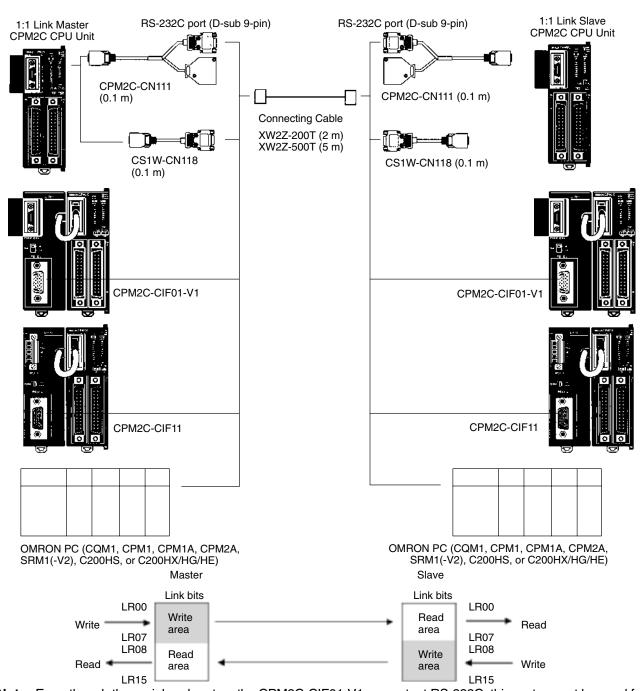
A 1:1 PC Link of up to 256 bits (LR0000 to LR1515) can be created with the data area of another CPM2A/CPM2C, CQM1, CPM1, CPM1A, SRM1(-V2), or a C200HX/HG/HE PC, where one serves as the Master, the other as a Slave. There is no need for a communications program on the PC.

The 1:1 PC Link can be used with an RS-232C port.

## **One-to-one PC Link**



4-3



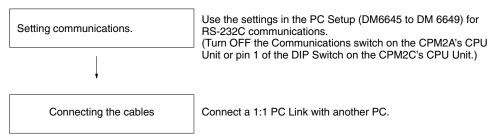
Note Even though the peripheral port on the CPM2C-CIF01-V1 can output RS-232C, this port cannot be used for one-to-one link communications.

4-3

#### PC Links with Other PCs

The link relay area on CPM2A/CPM2C PCs is only 16 words, LR00 to LR15. When performing a 1:1 PC Link with a CPM2A/CPM2C PC and a CQM1, C200HS, or C200HX/HE/HG use the corresponding 16 words, LR00 to LR15 on the CQM1, C200HS, or C200HX/HE/HG PC. A 1:1 PC Link with a CPM2A/ CPM2C PC cannot be formed using LR16 to LR 63.

# **Application Procedure**

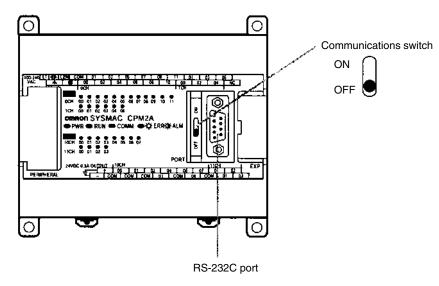


#### **Communications Switch** Setting

The CPM2A's communications are controlled by the communications switch on the front of the CPU Unit and the CPM2C's communications are controlled by the DIP switch on the front of the CPU Unit.

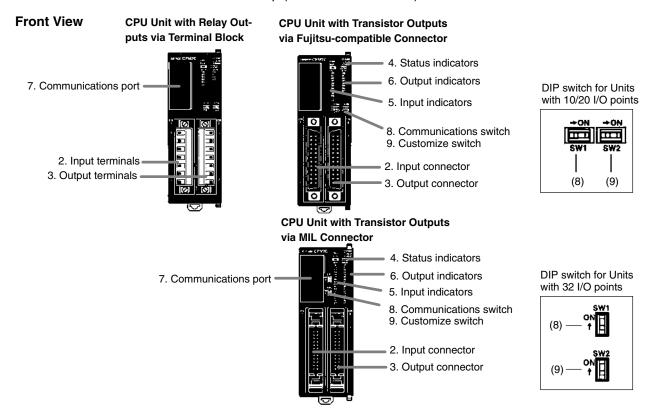
#### **CPM2A Communications Switch Setting**

Turn OFF the Communications switch when using 1:1 PC Link communications. One-to-one PC Link communications will not be possible if the communications switch is ON.



## **CPM2C DIP Switch Settings**

Turn OFF pin 1 of the DIP switch when using 1:1 PC Link communications so that communications through the RS-232C port are governed by the settings in the PC Setup (DM 6645 to DM 6649).



Pin settings	Pin settings RS-232C port communications			
Pin 1				
OFF	Governed by the PC Setup			
OFF	(DM 6645 to DM 6649)			
ON	Governed by standard settings			
ON				

## **PC Setup**

When creating a 1:1 PC Link with a CPM2A/CPM2C PC, use a Programming Device to make the following settings to the PC Setup (DM 6645) in the Master and Slave.

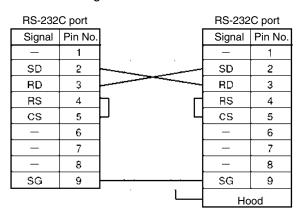
Word	Bit	Function	Master Setting	Slave Setting
DM 6645	00 to 03	Port settings 00: Standard (1 start bit, 7-bit data, 2 stop bits, even parity, 9,600 bps) 01: Settings in DM 6646	Any	Any
		(Other settings will cause a non-fatal error, the default setting (00) will be used, and AR 1302 will turn ON.)		
	04 to07	CTS control settings 0: Disable 1: Set	0	0
	08 to 11	Link area for 1:1 PC Link 0: LR 00 to LR 15	0	0
		(Other settings: Disabled)		
	12 to 15	Communications mode 0: Host Link; 1: No-protocol; 2: 1:1 PC Link Slave; 3: 1:1 PC Link Master; 4: 1:1 NT Link	3	2
		(Other settings will cause a non-fatal error, the Host Link setting will be used, and AR 1302 will turn ON.)		

For information on the 1:1 PC Link settings of another OMRON PC, refer to that PC's Operation Manual.

# **Connecting the Cables**

This section describes the RS-232C connection.

The RS-232C cable used for 1:1 PC Links is a cross connection cable. When there is no CTS control on the RS-232C port, the connection is made as shown in the following diagram. With the CPM2C, the CPM2C-CN111 and CS1W-CN118 connecting cables are used.



Recommended cables

XW2Z-200T: 2m XW2Z-500T: 5m