

# Installing the DCM and Starting the Network

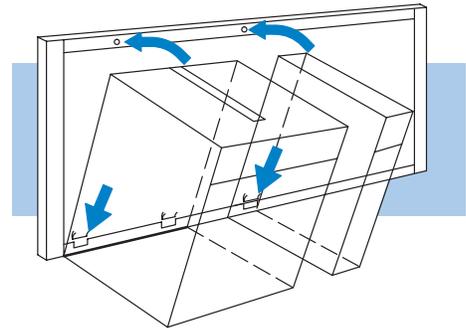
## Install the DCM

If you're using a DCM as the network interface in a PLC master station, make a note of the slot location. (This will be used in the RLL communications program. See Appendix A for details). If you're connecting the DCM to a host computer or operator interface master you can install the DCM in any slot of the slave station.

**NOTE:** The DCM *can not* be mounted in a base that does not contain a DL405 CPU. Also, the DCM requires 500 mA of +5V base power. Make sure you will not exceed the available base power budget by installing the DCM. See the DL405 User Manual for complete details on power budget calculations.

**WARNING:** To minimize the risk of electrical shock, personal injury, or equipment damage, always disconnect the system power before installing or removing any system component.

1. Notice the I/O module has a plastic tab at the bottom and a screw at the top.
2. With the module tilted slightly forward, hook the plastic tab on the module into the notch on the base.
3. Then gently push the top of the module back toward the base until it is firmly installed into the base.
4. Now tighten the screw at the top of the module to secure the module to the base.

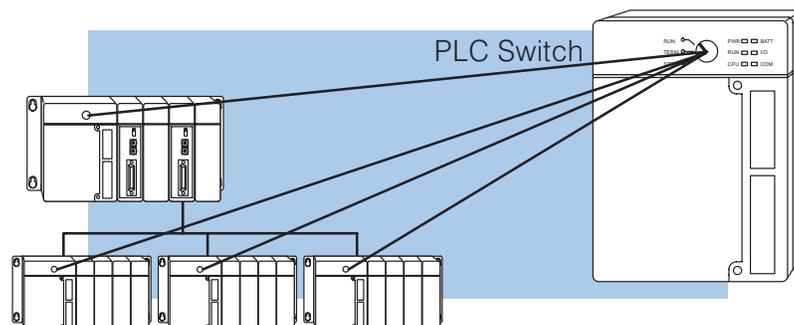


## Connect the Cables

Make sure you have all the cables connected and that all the network devices have the same communication parameters (baud rate, parity, etc).

## If you're using DirectNET...

The PLC master station must contain an RLL communications program. (See Appendix A for details on the RX and WX instructions). The master station CPU must be in Run mode in order to execute the communications program. The slave station CPUs do not absolutely have to be in Run mode because the DCM will still transfer the data. Whether you put the slave stations in Run mode depends on your application requirements.



**If you're using an Operator Interface or Host Computer...**

Connect the cables and follow the procedures outlined in the documentation that came with your host computer software or operator interface. You'll have to execute your host or operator interface program before the communications can begin. For example, if you're using *DirectSOFT*, you can just specify the station address and start working!

**If you're using Modbus®...**

Follow the procedures outlined in your Modbus® Host software package to start the communications. The following table provides the types of operations allowed and a cross reference for the DL405 memory types.

DL405 Memory Type	Range (Octal)	Operations Allowed	Modbus® Starting Reference (Hex)	Modbus® Function
V memory	0000–7777	Read Write	0000h 0000h	03 and 04 06
X (input)	000–477	Read	0800h	02
Y (output)	000–477	Read Write Write Multiple	0800h	01 05 15
C (control relay)	000–737	Read Write Write Multiple	0C00h	01 05 15
Timer (contact)	000–177	Read Write Write Multiple	1800h	01 05 15
Counter (contact)	000–177	Read Write Write Multiple	1900h	01 05 15
Stage (status bit)	000–577	Read Write Write Multiple	1400h	01 05 15
SP (special relay)	000–137 320–617	Read Read	0D00h 0DD0h	02 02

**NOTE:**

1. You cannot access V-memory addresses above V7777 (octal).
2. With Function 15, Write Multiple coils, you must write in 8 bit increments. This function is not supported with the number of coils less than 8.
3. Timer and counter current values are stored in V-memory areas V000–V177 and V1000–V1177 respectively. These values are stored in BCD format unlike the remainder of V memory which is stored in binary.