

Below is an example of logic to initiate a “software” reset of the 2572 module from the PLC. A reset of the 2572 is initiated when the Reset Bit (WY3.1) and all four Abort Trigger Bits (WY4.4, WY4.8, WY4.12, and WY4.16) are turned ON simultaneously. An ON and OFF transition of C2 will initiate a reset of the 2572 module.



Troubleshooting Tips

Before the Network Server is started, the red ACTIVE LED will blink at a rate of about once per second. After the Network Server is successfully started, the red ACTIVE LED will remain ON steady. If the ACTIVE LED continues to blink you can use the following troubleshooting steps to determine the cause. Also, refer to [Chapter 5](#) of the *2572 Ethernet TCP/IP Communication Processor User Manual* for general troubleshooting techniques.

1. Monitor WX1 to ensure that the low byte is incrementing.

The low byte of this input word is a counter that increments from 0 to 255 when the 2572 module is operating properly. If WX1 is zero, recheck the PLC I/O configuration to ensure that the 2572 module is logged in correctly. If not, correct the I/O configuration and proceed to Step 4.

If WX1 has a value in the low byte but is not incrementing, this could indicate a module fault. If this is the case, also go to Step 4. If none of these conditions apply, proceed to Step 2.

2. Monitor the module status bits in WX2. You should display this word in either binary or hexadecimal format to observe the status of individual bits.

If the Command Error Bit (WX2.1) and the Command Busy Bit (WX2.3) are **ON** and the PLC Error Bit (WX2.2) is **OFF**, then look at the Command Error Word of the Start Network Server Command Block (V100) for an error code. If V100 contains an error code, refer to the *2572 Ethernet TCP/IP User Manual, Appendix B* and find the error code in the error code list. This list provides a description of the error and a probable cause. Correct the problem and go to Step 4.

If the Command Error Bit (WX2.1), PLC Error Bit (WX2.2), and Command Busy Bit (WX2.3) are all **ON**, this indicates that the Start Network Server Command Block may contain invalid data or the data pointer in WY5 is pointing to the wrong V memory address for the Start Network Server Command Block. Check the command block for incorrect or erroneous data and ensure that WY5 contains the correct V memory address. Make corrections, if necessary, and go to Step 4.

If no bits in WX2 are **ON**, i.e., WX2 is 0, check your ladder logic for errors or omissions. Ensure that the Status Bits, Control Bits, and Control Words used in your logic are consistent with the 2572 module login address in the I/O configuration. Correct your logic, if necessary, and go to Step 4.

If none of the above conditions apply, proceed to Step 3.

3. Ensure that the 2572 Switch Block SW2 is correctly set for PLC Start mode.

Remove power from the PLC base and remove the 2572 module. Ensure that Switch #4 of Switch Block 2 is in the **OFF** position. Reinstall the 2572 and apply power to the rack. If the ACTIVE LED continues to blink, go back to Step 1.

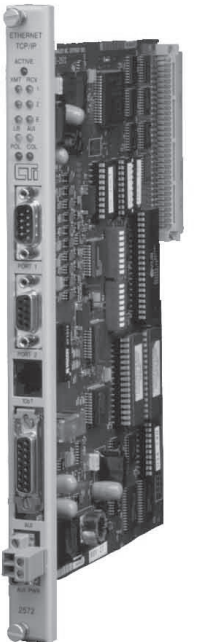
4. Reset the 2572 module. If the ACTIVE LED still does not stay ON steady, begin at Step 1 again to try to determine the cause.

Starting the 2572 Network Server from PLC Logic

Before the 2572 can communicate on a TCP/IP network, you must establish the network parameters. These include an **IP Address** and **Subnet Mask** for the module, a **TCP/UDP port number** for the PLC Network Server function, and, if your network contains a router, the IP Address of the **Default Router**. See [Appendix E of the 2572 Ethernet TCP/IP Communication Processor User Manual](#) for a complete description of TCP/IP address nomenclature. You may also wish to refer to the CTI application note *IP Addressing and the 2572*.

There are two methods for establishing the network parameters. One method allows you to load the information directly from data stored in the EEPROM on the 2572. The second method, which is described in this application note, allows you to use the PLC program to set the IP address and other network parameters. When you use PLC logic to set the network parameters, you can ensure that the IP address is directly associated with the PLC and not the module.

The 2572 uses the PLC V memory to store command information and the module **WX/WY** words to control execution of the commands. If you are not familiar with this interface, please refer to [Appendix D of the 2572 Ethernet TCP/IP Communication Processor User Manual](#).



2572 Dip Switch Settings for PLC Start

To start the network server from PLC logic, the 2572 module Network Startup dipswitch must be set for PLC Start mode (OFF position). The Network Startup Option is selected by switch #4 on Switch Block 2.

| | ON | OFF |
|---|----|-----|
| 8 | | |
| 7 | | |
| 6 | | |
| 5 | | |
| 4 | | |
| 3 | | |
| 2 | | |
| 1 | | |

SW2

| Switch 4 | |
|--------------|------------|
| Startup Mode | Position |
| PLC Start | OFF |
| Auto Start | ON |

Physical Installation of the 2572 Module

Inserting the Module into the I/O Base

Turn off the base power supply. Hold the top and bottom of the bezel and slide the module carefully into the slot, pushing it all the way into the base. If you have inserted the module correctly, you will feel a slight increase in resistance as the module mates with the base backplane connector. Once the module is fully seated in the slot, tighten the captive screws at the top and bottom to hold the module in place. To remove the module from the I/O base, loosen the captive screws, then remove the module. Take care not to damage the connector at the back of the module when inserting or removing the module.



