TECHNICAL NOTE # 206A

RE: Monitoring PM Com-Fails with a Relay Module  
Versions: 1.32 and older  
Date: December 14, 1999. Revision A

Hardware Requirements

If there are 2 or more PMs in the system, then a NIM must be used. The NIM must be located in the PM that is connected to the RM which has been assigned the PM Com-Fail Alarm.

If only 1 PM is in the system, then a RS422/485 Adapter is sufficient to connect to the RM. (A NIM can also be used.) In either case, if the PM fails, all relays on the RM will go into alarm after approximately 15 seconds. There is no need to assign a relay to the PM Com-Fail alarm in this case.

Software Requirement

When two or more PMs are in the system, you must assign the PM Com-Fail Alarm to a relay. This relay can be on any RM connected to the PM with the NIM.

The system needs to be told where the NIM is located. This is done by selecting CONNECT > REBUILD NETWORK. The following screen will appear:

Set the PM number to the address of the PM with the NIM card. Leave the Auto select unchecked. Press OK. This will set the address of the NIM (Address 2 in this example). The following screen will appear:
Select Yes.

The PM with the NIM will run a heartbeat to all PMs to verify if they are still on-line. This heartbeat is separate from and in addition to the heartbeat that the PC sends out. If any PM fails to respond, a message will be sent to the assigned PM Com-Fail relay. If the PM with the NIM fails, the RM will release all relays after a 15 second delay.

You should not assign the PM Com-Fail Alarm to a relay on the PM since there is no guarantee that the alarm will trip if that particular PM fails.