PanelMate Power Series/Pro on Device Net

1. Determine the amount and type of information that needs to be sent and received by the PanelMate. The more information processed directly affects the responsiveness of the network throughput and the PanelMate’s ability to process the information.

   NOTE: Refer to the PanelMate DeviceNet Communication Driver Manual for a detailed description of the following topics.

   a. Sending information to the PanelMate from the master over DeviceNet is considered a Polled Command (PC).
   b. The PanelMate receiving information from the master on DeviceNet is considered a Polled Response (PR).
   c. Bit Strobed Responses (BSR) can also be sent from the PanelMate. The difference between a BSR and a PR; is a BSR will create less traffic on the network. Using a PR will almost double the amount of traffic on the network. Bit Strobed Commands can only be sent from the master and are normally not used for the PanelMate setup.
   d. PanelMate can also monitor the network traffic. All information sent over DeviceNet can be picked up and monitored through the PanelMate.

2. The PanelMate PLC name and port table is set up as follows:

![PanelMate Configuration Editor - ID: V257_D0 "PanelMate Configuration Editor - ID: V257_D0"
Normal](image)
a. The local ID is the MAC ID of the PanelMate on DeviceNet. This is set in the PanelMate software only, and must be downloaded with a configuration and the driver to be seen over DeviceNet.
b. The remote ID is the Master’s Mac ID (Scanner Card.)

3. When the DeviceNet button in the PLC name and port table is selected, the DeviceNet setup screen will appear. The DeviceNet Setup screen is where the amount and type of information processed by the PanelMate is set up.

- **Label** is a generic name given to the message that will be used later to setup the PanelMate screens.
- **Mac ID** is set for the Mac ID of the device that the PanelMate is reading information from or the PanelMate is sending information to, unless that device is the master. If the device is the master, the PanelMate Mac ID should be entered.
- **Message Type** is described above in section 1.
- **Length** of the message is given in bytes. The Message Length of the PMPR and the PMPC message **MUST** match what the master (scanner) is setup to send and receive to the PanelMate.
- “dn50pr” and dn50pc are setup so that the PanelMate can monitor PC’s and PR’s sent to the DN50 on the network. The Length of these messages **MUST** match what is found in the I.L or EDS file for the device. A check of the master could also verify the Message Length being sent to the device or in this case the DN50.
4. Finally, the screens in the PanelMate application need to be configured.

a. Above is a snapshot of an Indicator template referencing pmpc byte 0 bit 2. The PC (Polled Command) is being sent from the master to the PanelMate. “/2” indicates a bit reference within byte 0. A byte reference would read [pmpc 3] this is byte 3 of the message (pmpc) being sent to the PanelMate (8 bits). A word reference would read [pmpc W1] this is a 16 bit word. Word references use 2 bytes of data. For instance, W1 references bytes 2 and 3.
b. Below is a snapshot of an Indicator template controlling pmbsr byte 0 bit 1. The BSR (Bit Strobed Response) is being sent from the PanelMate to the master in order to turn on bit 1 of byte 0.

c. PanelMate can only write to the master over the network. PanelMate **CANNOT** write directly to another device. For the PanelMate to trigger an action in another device, it must send a response to the master so the master can perform that action in the logic.