

TROUBLESHOOTING PURPLE MIU'S

For Millennium 2.6x

One of the more common technical service calls to Mattec is that the real-time screen is displaying one or more machine numbers in purple. This service call is common due to the complexity and flexibility of the Millennium system. It is critical that you resolve communication issues promptly to assure the data being collected at the MIU's will be sent to the host computer for permanent storage. The communications configuration consists of software, hardware and wiring (see configuration below). Each of these components must be configured and connected properly. The user has the ability to change each of these components depending on the specific needs of the facility. In many cases, after changes have been made, communication issues result. Hopefully, the information below will assist you in determining the cause(s).

A machine number shown in purple on the real-time screen indicates that the MIU is not communicating with the host computer. The machine number may be constantly purple or may go in and out of purple. Prior to troubleshooting, it is important to gather as many facts about the state of the system as possible. Note any changes made to the software, hardware, wiring, and eprom's. Isolate the problem by determining how many MIU's are not communicating, on what channel, and on which monitoring node. Executing the program *S_comm* from a terminal prompt will show you the MIU's not responding. Touch the F1 key to reset and note if the RCV number for the machine(s) in question is zero or counting up. If the number is counting up, the MIU is not communicating with the computer. On the topic of wiring, **THERE SHOULD BE NO SPLICING OF THE BELDEN 8777 ON ANY OF THE CHANNELS.** Splicing will cause a multitude of communication problems. In addition, be sure the Belden 8777 is not installed near florescent or mercury lights, material lines and static charges, or high voltage conduit.

Below are some helpful troubleshooting steps to resolve MIU's not communicating with the host/monitoring node computer. If the item number of the symptom is next to the suggestion, then attempt the suggestion when troubleshooting. Be sure to review the MIU Wiring/Installation Instructions Booklet (710-0043) for specific MIU and Buffer Box setup and wiring instructions. In addition, visit our website at www.mattec.com for additional information. If you do not feel comfortable with performing any of these suggestions call Mattec Service for further assistance.

SYMPTOMS ON THE REAL-TIME SCREEN

1. One or several machine numbers purple each on separate channels.
2. Multiple machine numbers purple on the same channel.
3. All machine numbers purple on the same channel.
4. All machine numbers purple on multiple channels.
5. All machine numbers purple on all four channels.

TROUBLESHOOTING SUGGESTIONS

- | | |
|-----------|--|
| 1 2 3 4 5 | Reboot the MIU(s). |
| 1 2 | Check the eprom revision (chip in MIU labeled 750-XXXX Rev.X). |
| 1 2 | Check the communication wiring connections at the MIU (reviewed in this manual). |
| 1 2 | Replace the comm chip in MIU (do not attempt if not familiar with this chip). |
| 1 2 | Replace the MIU(s) with another working MIU. |
| 1 2 | Swap the MIU(s) into another position on the channel. |
| 1 2 3 | Check the status of the int msg tmr (should reset every couple seconds, MIU menu 22,2). |
| 1 2 3 | Check the address at the MIU(s) and computer (MIU menu 22,2 / SysMan, Install, MIU). |
| 1 2 3 | Check the IU Type at the computer (SysMan, Install, MIU). |
| 1 2 3 | Check the channel number at the computer (SysMan, Install, MIU). |
| 1 2 3 | Introduce the MIU's on the channel one at a time (unplug communication connectors) |
| 1 2 3 4 | Using a digital multitester, ohm out the Belden 8777. |
| 1 2 3 4 | Replace the segment of Belden 8777 in question. |
| 3 4 5 | Check the Network configuration (SysMan, Install, Network). |
| 3 4 5 | Check the communication wire connections at the buffer box . |
| 3 4 5 | Check the LED's in the buffer box (green LED data out to MIU, red LED data in from MIU). |
| 3 4 5 | Check the cabling between the buffer box and computer. |
| 5 | Perform shutdown and restart the Millennium system (UnixWare desktop, click Shutdown) |

ProHelp Millennium Communications Configuration

