Troubleshooting

6

In This Chapter. . . .

— Troubleshooting
— Panel Configuration Problems
— Panel to PLC Communications
— A-B Panel to PLC Communications

Troubleshooting

Troubleshooting the OP–640 Panel

Troubleshooting

In this section, we explain how to isolate potential problems which may occur while using the OP-640. If you are unable to troubleshoot and correct your problem using these procedures, please contact our technical product support team between the hours of 9:00 AM and 6:00 PM (EST) Monday through Friday.

We have organized the troubleshooting section into two categories:

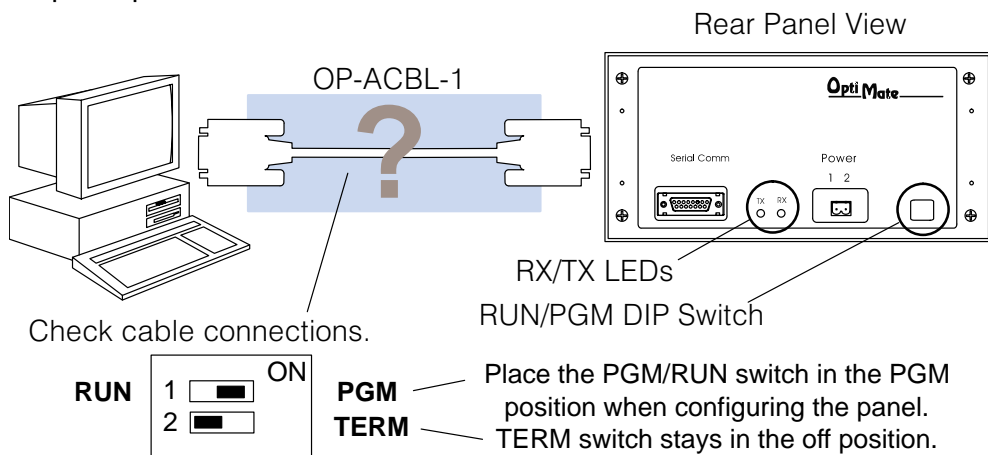- Panel configuration problems
- Panel and PLC communications failures

Panel Configuration Problems

We explained in previous sections that the OP–WINEDIT configuration software is used to create OP-panel applications and to download and upload your OP-panel programs. If you are online with the panel and communications fails, the following error message is displayed:

"Could not communicate with panel"   (OP–WINEDIT)

If this occurs, check the following in the order given:

1. Check the rear panel RX/TX LEDs while attempting the Upload or Download operation. Both LEDs should be giving slow alternating flash signals, indicating the PC and OP–panel are connected. If *only* the TX (transmitter) LED is flashing, or if the TX/RX LEDs are *not* alternating between flashes, check that the OP–panel is set to the configuration mode by setting the RUN/PGM DIP switch to the PGM position.

2. Check to make sure the configuration cable **(OP–ACBL–1)** is properly connected.

3. Make sure the correct communications port is selected with the software, such as COM1, COM2, COM3, COM4.

4. Check the 24VDC power source and connections.

5. Make sure that *Direct*SOFT programming software is not running.

6. After checking the above items, repeat the online panel Download or Upload procedure.

Rear Panel View

OP-ACBL-1

RX/TX LEDs

RUN/PGM DIP Switch

Check cable connections.

Place the PGM/RUN switch in the PGM position when configuring the panel.
TERM switch stays in the off position.

Panel to PLC Communications Problems

If you experience communications difficulties between the OP-panel and PLC for a period of twelve seconds, the LEDs in the corners of the five pushbuttons will flash rapidly.

In this case, you should check the following items:

1. Observe the TX and RX LEDs on the rear of the panel. Both LEDs should be a steady flash or glow (depending on baud rate). If not, check and make sure you are using the proper communications cable and that it is securely connected.

2. Examine the PGM/RUN DIP switch to make sure it is placed in the RUN position. You must cycle OP-panel power for address switch changes to take effect.

Rear Panel View

RUN / **PGM** **TERM**

RX/TX LEDs

PGM/RUN DIP Switch
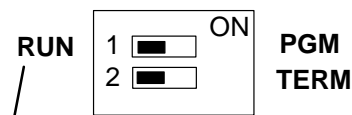
Place the PGM/RUN switch in the RUN position when running the program.
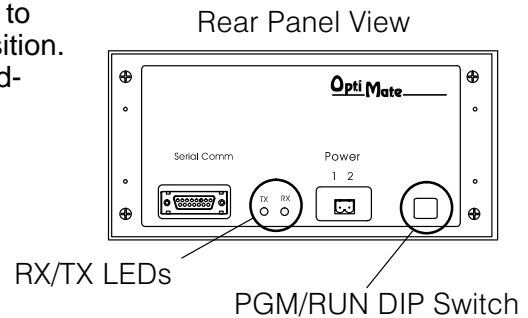
3. Examine the communications information for the proper PLC type, protocol, baud rate, parity, stop bit, address number. Use the user manual for the PLC product you are using to determine the proper settings.

4. If you are using an OP cable, verify cable pinout. For RS–422 connections use a Belden 9729 or equivalent cable.

5. Check 24VDC power source and connections.

DirectLOGIC **PLCs :** If you are using the secondary communications port such as **Direct**LOGIC PLC port 2, ensure the communications port address and protocol setting match.

Troubleshooting

Allen-Bradley Panel to PLC Communications Problems

OTHER

PLC

For Allen-Bradley, you must connect to Channel 0 (bottom serial port), using DF1 in full duplex mode. Typically, the only change that needs to be made to channel 0 is the baud rate. Leave all other settings at their default value. The Allen-Bradley port must be set to either 4800 or 9600 baud. No other baud rates are supported between the OP-panel and Allen-Bradley PLC. Also, the base memory area must be expanded to include the full range of registers such as N7:0 through N7:13.

OTHER **PLCs :** Regardless of which PLC brand you are implementing, the communications parameters should be reviewed and properly configured. Please check the appropriate manual for your PLC product to ensure proper communications port and panel type settings.