

Troubleshooting L-EMF-DAC installation and operation

Please begin by reviewing the troubleshooting section in the [manual](#), beginning on page 27.

First, if L-EMF-DAC software fails to start your EMF16, download [this batch file](#). After download, extract setCOM.bat from archive, right-click on setCOM.bat and select "run as administrator". Enter the COM port for the EMF16 at the prompt. Then run L-EMF-DAC as before. You will need to rerun setCOM.bat each time the computer is rebooted.

A) Can't start, after installation

- 1) Unsuccessful install. Windows may not tell you that the install is incomplete. You need to right click on setup.exe and select "run as administrator". If that doesn't work, click on uninstall.exe and select "run as administrator", then right click on setup.exe and select "run as administrator"

- 2) You may need to run L-EMF-DAC "as administrator". Just having administrator rights may not be enough. You should right click on the application and select "run as administrator"

- 3) The COM port needs to be set correctly. If the run light does not turn on when you click Start, the COM port setting may be wrong. See the Manual for instructions on setting the port.

If you are using a USB to serial converter, go to the Device Manager, and select Ports. You should see your USB to Serial converter, with the assigned COM port number. The port must be 10 or lower. If not, select properties/port settings and click the Advanced button. Then, set the com port to a lower numbered available port.

BEWARE! If you plug your USB to serial converter into a different USB jack, it will change the COM port assignment.

If the RUN light comes on, but the scan does not start, an administrative rights problem, or an incomplete install are indicated. See 1 and 2 above.

- 4) If the problem persists, reboot the computer.
- 5) If step 4 doesn't fix the problem, repeat step 1 above. Once an install is successful, the installation should not need to be repeated.

B) Can't start, after some success

- 1) Reboot the computer, it is possible the COM port is stuck in an unavailable state
- 2) Error 37, another application owns the COM port. Close that other application.
- 3) Try cycling the EMF16 power off and back on. That puts the unit in a known state.
- 4) Did you "run as administrator"?

C) Stops during operation, sometimes

- 1) Lower the BAUD rate in Setup
- 2) If the earth connection is not made at the end of the 10-foot grounding cable, static discharge may cause serial errors.
- 3) In rare cases, the virtualization of the serial ports may cause timing problems. See A 3 above regarding the Advanced tab in the Device Manager. At that screen, set the buffers to the minimum to reduce timing skew.

D) While rare, it is not impossible that there is a hardware issue.

Before coming to that conclusion, we recommend downloading the [M201 software](#). Follow the installation and getting started instructions to determine if the problem is in the hardware or in the L-EMF-DAC software. Contact the factory for further support.

Background for the "RUN" light, and its significance:

The Model 201 board inside the EMF16 has a sleep mode for low power, usually only important for battery-powered applications. When the EMF16 is first turned on, the RUN light comes on for about 8 seconds. During this time, the unit is awake, and is waiting for serial instructions. If none succeed, the unit goes to sleep after 8 seconds of serial inactivity, and the RUN light goes out. If the initialization does succeed, the RUN light stays on indefinitely.

After successful initialization, the RUN light is on. Three things will make it turn off.

- 1) A communications error
- 2) A "sleep" command sent by the software
- 3) A power cycle followed by 8 seconds of inactivity.

Regardless of whether the unit is awake or asleep, any compatible software should be able to wake up and initialize the EMF16. The L-EMF-DAC package sends a "sleep" command when you click Stop. The M201 software does not.