Instruction Sheet

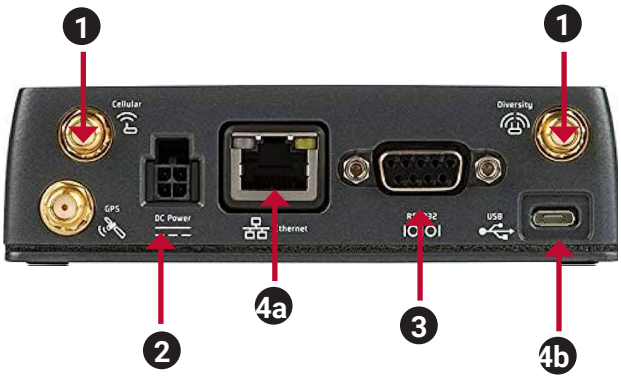
How to Connect Your Micromate® Monitoring Unit and Sierra Wireless™ Modem to Work with Vision *II*

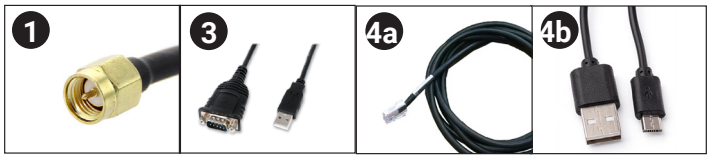
This document describes the hardware connection steps between a **Micromate** monitoring unit and **Sierra Wireless Modem** for Vision *II*.

Prerequisites:

- **A Micromate unit with a serial number greater than UM8000.**
- **A Sierra Wireless modem model numbers RV50, RV50X, or RV55.**

Step 1: Modem Connections



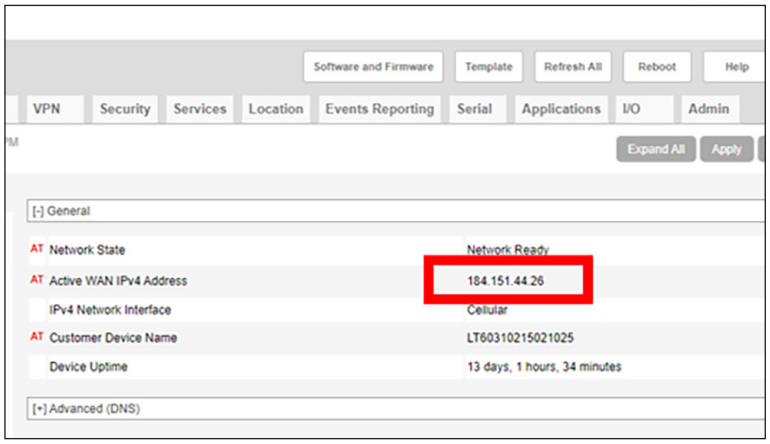


1. Plug in both antennas. One is for Cellular (input) signal (required) and the other is for Diversity (optional.)
2. Plug in the DC power connector.
3. Connect the modem to the Micromate monitoring unit using a Serial to USB adapter cable with the RS-232 port (3b).
4. Use either an Ethernet cable (4a) or a Micro USB (4b) for the initial configuration through the ACEmanager.
5. After connecting the modem and it is powered on, wait a few minutes for it to "initialize". You should see a green status light. (If you see yellow or orange, try to position the antennas to get a strong cellular signal.)

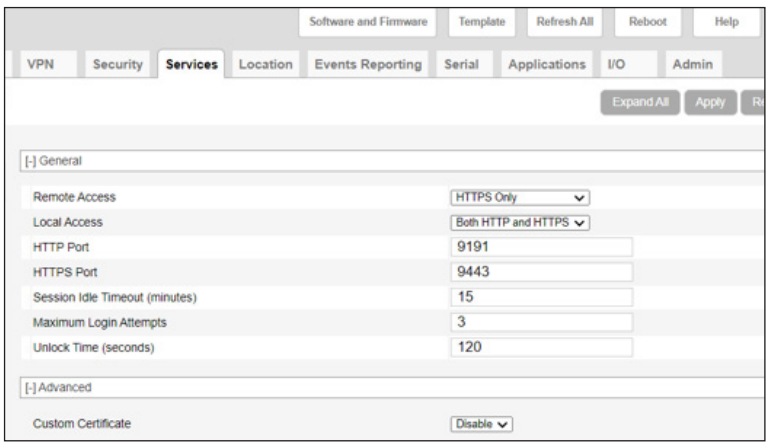
Step 2: ACEmanager Configuration

1. Plug in the Ethernet/Micro USB (4) to your PC.
2. For the Ethernet cable, open the ACEmanager Sierra Wireless site: http://192.168.13.31:9191/
   For the Micro USB cable, open the ACEmanager Sierra Wireless site: http://192.168.14.31:9191/
3. Enter your username and password and click "Log in".

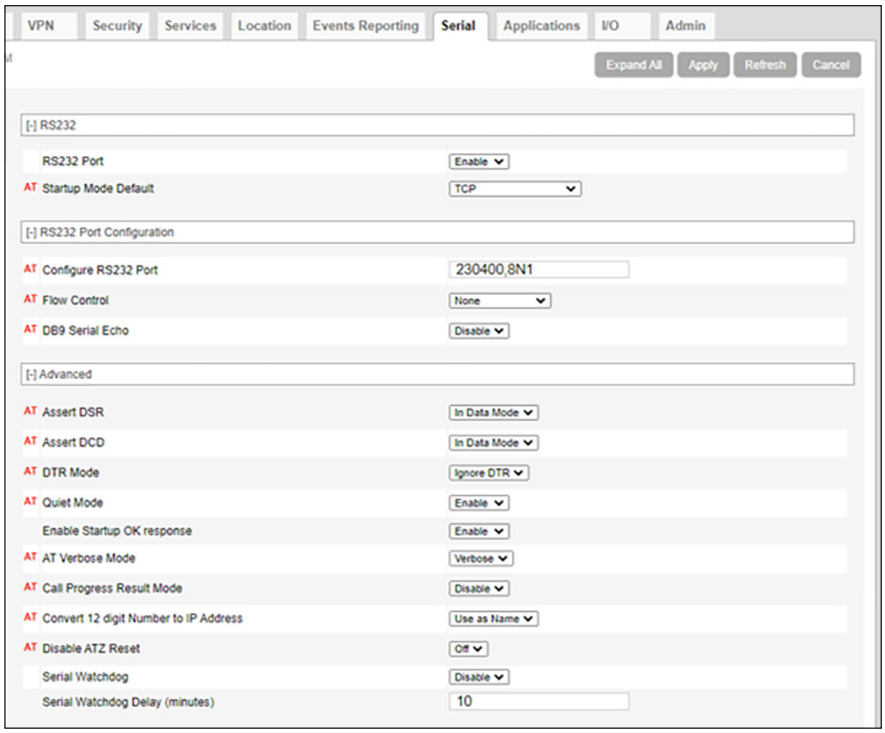
4. On the initial "status" page, take note of the Static Active WAN IP address. You can use this for future access without having to plug into a PC. Note: Use https://IPADDRESS:9443.



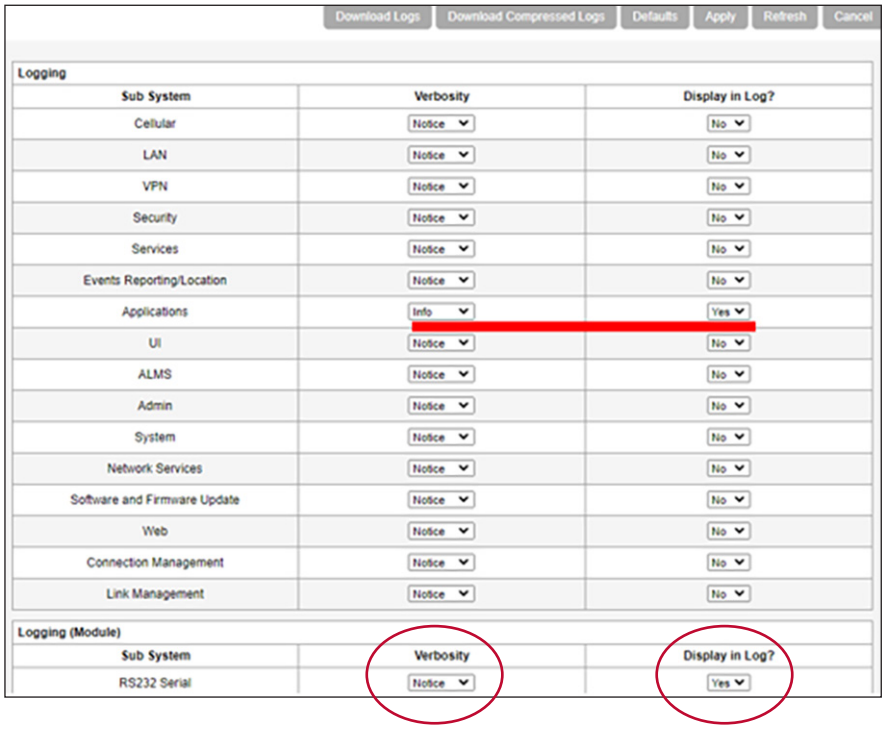
5. To configure the modem to support secure remote access, first select the Services tab.
6. Set the remote access to "HTTPS Only" and the local access to "Both HTTP and HTTPS".
7. Support both HTTP and HTTPS local access (by using the USB or Ethernet cable connection.)
8. Set the HTTPS Port to 9443.



9. Configure the Serial tab as follows:



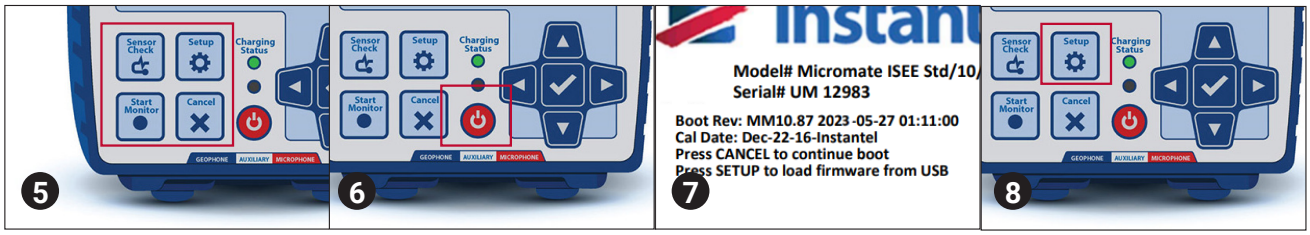
10. Adjust the Admin tab for login options (to remove any potential noisy log entries).
(i) Set Applications to Info and Yes.
(ii) Set Rs232 Serial to Notice and Yes.
(iii) Verify that all other values are set to Notice and No.



Step 3: Micromate Monitoring Unit Firmware Update

1. Download the support files onto your computer and insert a FAT32 formatted USB drive into your computer.
2. On the FAT32 USB drive, create a folder named"Instantel".
3. Within this folder, paste the files "MICROMATE.BIN" and "MICROMATE.LDR" from your computer.
4. Plug in the USB drive into the Micromate monitoring unit.

5. Perform a four-button reset by pressing and holding all four buttons for a few seconds.
6. Press and hold the Power button until the unit produces two (2) beeps.
7. As the Micromate monitoring unit begins to load, the following text will appear "Press Setup to load firmware from USB".
8. Press the Setup button **within 3 seconds**. If you do not respond within three seconds, the unit will engage in its regular initialization sequence. You will need to try again by repeating steps 6 and 7.

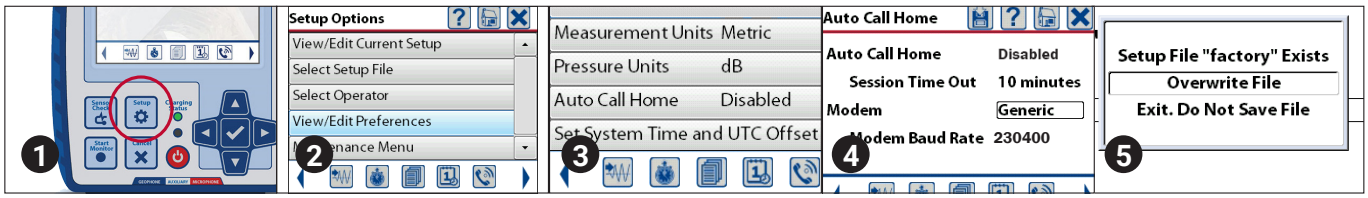


9. After the unit has verified the firmware files on the USB drive, you will see the following text "Update firmware press right arrow". Press the Right Arrow button.
10. Once the firmware is successfully loaded, the unit will display the "Ready to Monitor" screen. The Micromate unit has now been updated with the latest firmware.

Complete firmware installation instructions and the latest firmware release notes can be found on our website.

Step 4: Communication Setup on the Micromate Unit

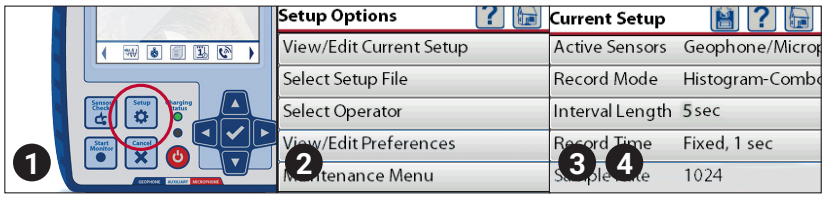
1. Press the Setup Button
2. Tap "View/Edit Preferences"
3. Tap "Auto Call Home"
4. Setup the following options
   (i) Auto Call Home = Disabled
   (ii) Modem = Generic
   (iii) Modem Baud Rate = 230400
5. Click the "X" and then save and overwrite existing file when prompted.



Step 5: Monitoring Setup on the Micromate Unit

1. Press the Setup Button
2. Tap "View/Edit Current Setup"
3. Tap "Record Mode" to be "Histogram-Combo" mode for the first start.
4. Set interval length to 5 seconds.

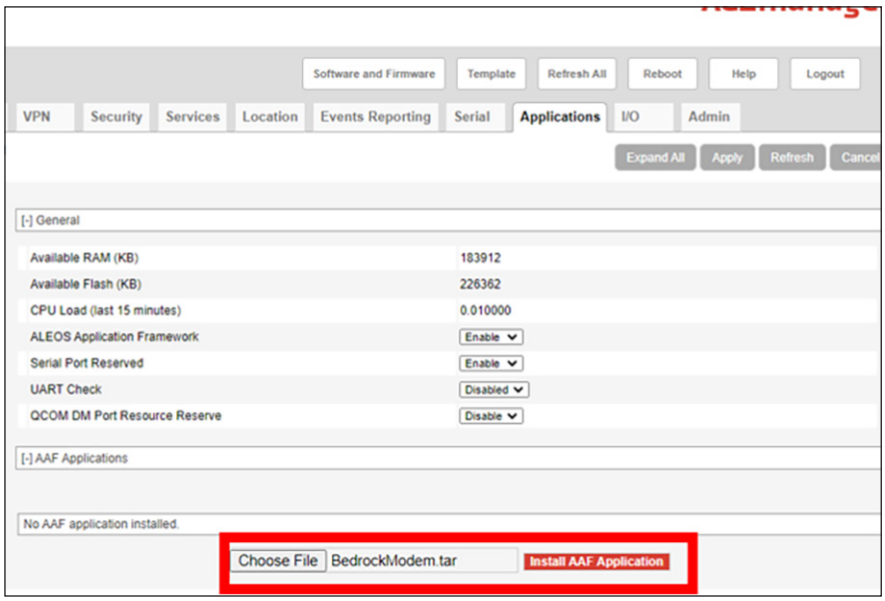
Note: Settings may be changed in Setup Options at a later date for specific needs.



Step 6: Modem Application Setup

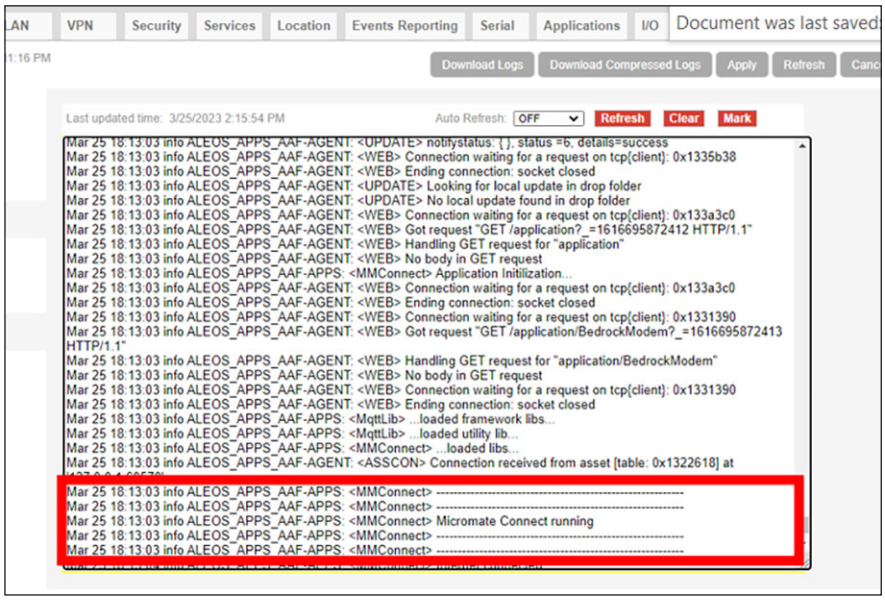
IMPORTANT: This step may only be completed <u>after</u> the firmware update on the Micromate monitoring unit.

1. Open the ACEmanager API, either using the USB address or the public IP address noted in the previous step.
2. Click on the Applications tab.
3. If there is an existing "BedrockModem" application (or ANY application), click on Stop and Uninstall. There should be no other applications running.
4. Click on "Choose File" and navigate to the folder where you saved the .tar file provided to you by Instantel. Select the file "BedrockModem.tar".
5. Click on "Install AAF Application". The status should display "Started".



Step 7: Modem Application Logging

1. Verify that the application is running correctly by clicking on the Admin tab. On the left side panel, under the "Log" section, click "View Log". You may need to refresh the log or simply wait for log to update. (This process can take a moment as the modem must upload the data and start the application. Times vary depending on your modem signal strength, usually less than 1 minute.)
2. Look for our application start up banner "Micromate Connect running". The log should eventually state "Remote Service Connections Established" or similar.



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