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## TECHNICAL SERVICE BULLETIN: 2023-01

**Date:** September 2023

**Subject:** End of Production of AMI P2 Oxygen Sensor and Analyzer Impacts



**P2 Sensor (0-50%) Discontinued**



**P3 Sensor (0-25% Oxygen)**



**P5 Sensor (0-25% Oxygen &  
<500ppm H<sub>2</sub>S)**



**P4 Sensor (0-100% Oxygen)**

### Description of Change:

AMI's Model P2 Oxygen sensor is being discontinued and will no longer be available once current inventories are depleted.

AMI's Model P3 and P4 oxygen sensors are the replacement sensor to use in AMI oxygen analyzers that were originally configured for P2 Sensors. The choice of replacement sensor is dependent on the desired measurement range in your application.

If the expected measurement **range is between 0 to 25% oxygen** you should use the **P3 or P5 sensor**

If you expected measurement **range will be exceeding 25% oxygen** you should use the **P4 Sensor**.

If you are using an AMI probe **Model 60** with a P2 Sensor, there is no available replacement sensor.



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### What the Customers Must Do

The switch from a P2 sensor to a P3 or P4 sensor will impact the behavior of the analyzer. The change will require either updating the configuration variables in the analyzer. The updated of the variables can be easily done by the customer for many of impacted AMI analyzers.

### Analyzers impacted and update procedure number:

**210BX** - follow **procedure 1**

**210BR, 201RS, 201RSP, or Watchdog** (percent version) - follow **procedure 2**

**1000RS** - follow **procedure 3**

**201LC** – must be **Returned to factory** for updating

**Model 60** - unfortunately there is **no option for updating** this product.

### Option for AMI Factory Update of Analyzer:

The customer has the option to send their impacted AMI analyzer to the AMI factory for updating. This step is required for the Model 201LC.

The AMI factory will perform a full evaluation of the analyzer and bring it up to the latest standard. This will include calibration with the desired P3 or P4 sensor.

The customer will be responsible for the cost of shipping the analyzer to the AMI factory, the new sensor as well as any other non-warranty repairs required. AMI will cover the costs of updating software, calibration and return shipment to the customer.

For this option request a RMA # at [www.amio2.com/request-rma/](http://www.amio2.com/request-rma/) Be sure to specify what sensor type you want the analyzer updated to. You will receive instructions for shipment to the AMI factory.

### AMI's Command Center Software Required

AMI's free Command Center Software is required to perform update Procedures 1, 2 or 3.

The customer can register and download the Command Center software at no charge from the AMI website [www.amio2.com/login/](http://www.amio2.com/login/).



The customer also will need the appropriate cable to connect their computer to the analyzer. The connection to the analyzer will be a USB Type B plug. A 10 foot USB Type B to USB Type A cable to connect a computer to the AMI analyzer can be purchased from **AMI under part # 3CAB03**.



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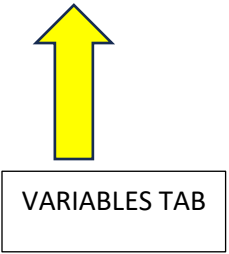
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### How to use Command Center to change AMI Analyzer variables

The analyzer will need to be in a non-flammable, safe environment. The analyzer will need to be powered and a USB cable connected from the AMI analyzer to a computer where the Command Center software program installed and running.



1. Verify the analyzer is communicating with Command Center. On the bottom right click the variables tab.





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- You will see that the “Password” is off and the color is red. To enter the password, click the user input.

The screenshot shows the AMI Command Center interface. At the top, there's a header with 'AMI COMMAND CENTER VER. 8.0' and 'Build Date: 3/19/2019 - 7:22:17 AM'. Below that, a status bar shows '2010V3', 'User ID: None', and '3/14/2023 - 10:47:58 Polling Enabled'. The main interface has a 'VARIABLES INTERFACE' section with 'ENABLE POLLING' checked and '1 Sec' refresh rate. A 'User Input' field is highlighted with a red box and a yellow arrow pointing to it, labeled 'User Input'. To its right are 'VARIABLES', 'REFRESH', and 'EXPORT' buttons, with the 'REFRESH' button also highlighted and labeled 'Refresh Button'. Further right, a 'Password Off' indicator is highlighted in red and labeled 'Password Status'. Below these are 'ANALYZER OUTPUT' and 'CLEAR OUTPUT' buttons. The main area is a table with columns: VAR, VALUE, DESCRIPTION, CLASS, COMMENTS, RESPONSE, and I. The table lists various variables like A (20.9%), B (11), C (v5.28), D (1814), E0 (3700), etc. The bottom of the interface has 'HOME' and 'VARIABLES' tabs.

- A pop up will appear asking for a userID and password. The user ID can be left as is, “None” and the password is, “AMI”.
- Clicking on submit will enter it and change the password indicator to “ON” and the color green. The variables can now be changed.
- Follow the procedure below appropriate for your AMI analyzer to change the variables.

The left screenshot shows a 'Submit Password' dialog box with 'USERID: None' and 'PASSWORD: AMI' entered. The 'SUBMIT' button is highlighted. The background interface shows the 'Password Off' status in red. The right screenshot shows the same interface after the password is submitted. The 'Password Off' indicator has changed to 'Password On' in green. The 'REFRESH' button is now highlighted in yellow, indicating it can be used to update the variable values.



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**Procedure 1: Updating a 210BX**

Changing to a P3 or P5 Sensor (0-25%)

1. With command center open verify the following variables
  - a. Variable B is set to "11"
  - b. Variable E6 Bit 5 is set to "1"
2. Change the Variable E0 from "P2" to "P3" and click the variable field to the left to save the new value to memory.
3. Verify the change was accepted by clicking the Refresh button.
4. If the variable was accepted, the analyzer is ready for air calibration with a P3 sensor and to be put back into service.

Changing to a P4 Sensor (0-100%)

1. With Command Center open verify the following variables
  - a. Variable B is set to "11"
  - b. Variable E6 Bit 5 is set to "1"
2. With command Center open change the following variables
  - a. Change Variable E6 Bit to "1" and click the variable field to the left to save the value to memory.
  - b. Change Variable E0 from "P2" to "P4" and click the variable field to the left to save the new value to memory.
3. Verify the changes were accepted by clicking the Refresh button.
4. If the variables were accepted, in the User Input field in Command Center type REBOOT and hit enter.
5. Once the analyzer has rebooted, the analyzer is ready for air calibration with the P4 sensor.





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**Procedure 2: Updating a 210BR, 201RS, 201RSP, or Watchdog (percent version)**

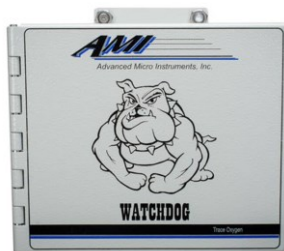
Changing to a P3 or P5 Sensor (0-25%)

1. With command center open verify the following variables
  - a. Variable B is set to "11"
  - b. Variable D is set to "2000"
  - c. Variable E0 is set to "3600"
  - d. Variable E2 is set to "1000"
  - e. Variable E6 Bit 5 is set to "1"
2. Change the Variable E1 from "26" to "36" and click the variable field to the left to save the new value to memory.
3. Verify the change was accepted by clicking the Refresh button.
4. If the variable was accepted, the analyzer is ready for air calibration with a P3 sensor and to be put back into service.

Changing to a P4 Sensor (0-100%)

[Note this is only for use when measuring 0-50% O2 like original range of P2 Sensor]

1. With command center open verify the following variables
  - a. Variable B is set to "11"
  - b. Variable D is set to "1850"
  - c. Variable E0 is set to "3600"
  - d. Variable E2 is set to "1000"
  - e. Variable E6 Bit 5 is set to "1"
2. Change the Variable E1 from "26" to "36" and click the variable field to the left to save the new value to memory.
3. Verify the change was accepted by clicking the Refresh button.
4. If the variable was accepted, the analyzer is ready for air calibration with a P4 sensor and to be put back into service.





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### **Procedure 3: Updating a 1000RS**

#### Changing to a P3 or P5 Sensor (0-25%)

1. With command center open verify the following variables
  - a. Variable B is set to "11"
  - b. Variable D is set to "1850"
  - c. Variable E0 is set to "3850"
  - d. Variable E2 is set to "800"
  - e. Variable E6 Bit 5 is set to "1"
2. Change the Variable E1 from "30" to "40" and click the variable field to the left to save the new value to memory.
3. Verify the change was accepted by clicking the refresh button.
4. If the variable was accepted, the analyzer is ready for air calibration with a P3 or P5 sensor and to be put back into service.

