Calibration Procedure: RBT IV
Using a .038 Alcohol Gas Tank and 1.5 liter-per-minute regulator.

Step 1: Attach Regulator
Follow instructions on the Alcohol Gas Tank to attach the regulator.

Step 2: Purge Regulator by pressing button/valve on regulator for approx. 8-10 seconds before running your first accuracy check of the day.

Step 3: Determine Gas Value by reviewing the elevation chart on the tank to calculate the alcohol concentration for the 0.038 tank at your elevation. The value can also be determined more easily by utilizing a True-Cal device.

Step 4: Locate Function switches
Remove battery cover from the front of the Alco-Sensor IV handheld unit to expose the function switches (F1, F2 & F3). Carefully remove the security tape covering the holes, if present.

Step 5: Start Calibration Procedure
Press the ON button on the RBT IV.
Press the REFUS. button (#2) to initiate Calibration Procedure. The display will ask you to verify the time, then the date.
Step 6: Turn on AS IV handheld unit

Turn on the Alco-Sensor IV handheld unit by securely inserting a disposable mouthpiece. The Alco-Sensor IV handheld must be properly connected to the RBT IV unit during insertion. Four red blocks will briefly appear.

Step 7: Observe automatic Air Blank

The AS IV handheld will now display the temperature, then will flash “<”, “>”, and “Wait”. Next, the display will flash “Blnk” while the instrument performs an Air Blank (you should hear a Click). If the instrument is free of alcohol, it should then read “0.00” for a few seconds.

Step 8: Set the calibration value

As soon as the air blank is complete, the AS IV handheld will then display a 3-digit reading. This number is the value of the last standard used for calibration. If the value of the gas standard being used for the current calibration is different than the value of the last calibration value displayed on the screen, use the switch key to adjust the number up (F1 switch) or down (F2 switch) until the number of the current gas standard is displayed.

Step 9: Prep instrument for gas flow

Once you have obtained the desired standard value on the display, press F3. The display will flash “CAL”. Securely attach the mouthpiece to the tube on the tank regulator, creating an airtight connection.

Step 10: Start Gas Flow

Press the regulator button for 7 seconds. On the 5th second, press the MANUAL button to take the gas sample.

Step 10 cont’d: Start Gas Flow

Press & release the MANUAL button
Additional Note on Gas Flow

**NOTE 1:** Gas must be flowing through the mouthpiece during the entire 7-second process, therefore continue pressing the tank regulator button for another 2 seconds AFTER you press & release the **MANUAL** button during the 5th second.

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Step 11: End Calibration Procedure

Detach mouthpiece/instrument from the regulator/tank.
The instrument will automatically make the necessary internal calibration adjustments, and will then display the newly programmed calibration value for a few seconds.
When “SET” is displayed, press the **SET** button.
When you hear the intermittent BEEP, press the **Red Release** button to eject the mouthpiece, which will turn off the instrument.

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Step 11 cont’d: End Calibration Procedure

Once the mouthpiece has been ejected, the RBT IV will print the results of the Calibration Procedure.
When the printing ends, the RBT IV will display “**RBT IV SELECT OPTION:**”. The Operator may now access any of the RBT IV menu options.
It is standard procedure to confirm the Calibration by performing a follow-up Accuracy Check, after a 3 minute waiting period.

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Successful Calibration Adjustment

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Step 12: Record Results

Record every Calibration Procedure in a Calibration Log to document the accuracy of the RBT IV.

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For technical assistance and to order calibration supplies:

**AlcoPro, Inc.**
**800 227-9890**
**www.alcopro.com**