

Operational Checks/ Alignment

1. Prepare a digital volt meter (DVM) to read DC volts. Select the 20 scale (if available on your model of test equipment)
2. Connect the DVM ground lead (black) to the top (towards the PC board center) of either R20 or R45.
3. Adjust the sensitivity controls, VR5 and VR6, to approximately 1/3 of the range. In the Standard and without Oral models, these controls are located externally from the PC board on the sensitivity panel at the upper right corner of the unit. In the Big BOSS, they are located on the PC board as shown on the schematic location diagram.
4. Adjust the trimmers VR1 and VR2 (Oral/Back) and VR3 and VR4 (Seat/Foot) to midrange.
5. Energize the unit.
6. Reset the unit.
7. Observe that all the LEDs illuminate momentarily after the reset switch is released. The buzzer will momentarily sound at the same time.
8. Observe that the "Ready" LEDs illuminate within three (3) to five (5) seconds.
9. After the "Ready" LEDs have illuminated, check the detection of the unit. It is required to detect a handcuff key at a distance of three (3) inches from the Oral/Back sensor, and four inches from the Seat or Foot sensor. Note1: The audio will sound immediately when you adjust the trimmers and the alarm LED will flash for the appropriate sensor. Note2: The audio may also be disabled while aligning the trimmers. Set the audio switch (SW1) to the down position (toward the center of the PC board).
10. On the Oral and Back sensors, touch the DVMs hot (red) lead to pin 8 on IC3 (see the location illustration in unit schematic), the DVM should indicate +1.500 vdc. Adjust VR2 and VR1 in tiny increments until a +1.500 vdc reading is obtained.
11. On the Seat and Foot sensors, touch the DVMs hot (red) lead to pin 8 on IC3 (see the location illustration in unit schematic), the DVM should indicate +1.500 vdc. Adjust VR4 and VR3 in tiny increments until a +1.500 vdc reading is obtained. Reset the unit. Note: For Big BOSS skip step 12 and continue with step 13.
12. Seal the unit
 - A. Position the unit back cover at the rear of the unit.
 - B. Remove the Sensitivity Panel assembly, but continue to hold it in one hand to prevent damage to the wires.
 - C. With your free hand, replace the back cover and then replace the Sensitivity Panel.
 - D. Secure both the back cover and the Sensitivity Panel assembly, using #6x1½" Torx self-tapping screws placed in each existing screw hole.
 - E. Start the #6x1½" Torx self-tapping screws into the four holes in the Sensitivity Control Security Cover.
 - F. Position the cover into place over the Sensitivity Control panel. Note: Apply steady pressure to the power drill while performing step G.