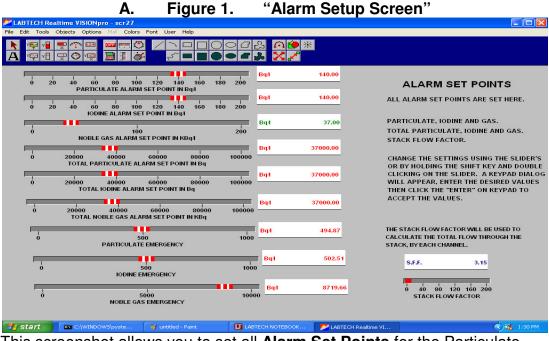
AIR MONITOR-GAS, GROSS BETA-GAMMA PARTICULATE, AND IODINE MODEL # CAM-33 PROGRAM SCREENSHOTS



This screenshot allows you to set all **Alarm Set Points** for the Particulate, Iodine, and Nobel Gas Chambers.

B.	Figure 2.	"Iodine Calib	oration Screer	າ"
ZABTECH Realtime VISIONpro - scr18				
File Edit Tools Objects Options Mail Colors Fon	t User Help			
▶ ¶ ¶ ₽ ∩ ⊠ ■ () A ¶ 1 ₽ 0 @ ()		£ ∩ 🕐 * ♣ <mark>X</mark> ✓		
STEP 1: MAKE SURE THE SINGLE CHANN	x	CHANNEL)	3 + 5 + 6 = 7 2 + 5 + 6 = 7 1 + 5 + 7 = 7 1 +	ON OFF
F	EL IS ADJUSTED PROPERLY FOR IND BACKGROUND CO	UNTS.	B.G. COUNTING TIME(MIN)	G.COUNT START BUTTON
		CLICK-HOLD AND DRAG THE KNOI TO "ON". CLICK-HOLD THE MOUSE I		.UE.
STEP 2:	FIND SOURCE COUN	тѕ	B.G.COU	JNTS/MIN
PULL OUT THE IODINE FILTER CARTRIDGE HOLDEF RE-INSERT THE FILTER CARTRIDGE HOLDER ALL T SET THE CALSTRENGTH ON THE SLIDER BELOWI ON THE SCREEN. CLICK ON THE KEYPAD DIGITS T THEN START SOURCE COUNTING BY SETTING SO THE PROGRAM LOOKS AT 20 SAMPLES OF 30 SE IS STORED IN A FILE TO BE USED IN THE MAIN PRO ANOTHER 10 MIN. IF THE TEST PASSES THE PROG THE CONVERSION FACTOR. THE PROGE AND THE	HE WAY INSIDE THE BIG SHIELD U BY PRESSING THE SHIFT AND DOU O DISPLAY THE NUMBER AND PR JRCE COUNT START BUTTON TO C. COUNTS AND PERFORMS A ST DGRAM. THIS TAKES ABOUT 10 N RAM LOGS IN THE CONVERSION	INTIL IT STOPS. JBLE CLICKING THE MOUSE POINTE ESS ENTER TO ACCEPT IT. SOURCE "ON". CLICK-HOLD THE MOUSE POI ATISTICAL TEST. IF IT PASSES, IT C IIN. IF IT FAILS, THE PROGRAM CON FACTOR. OTHERWISE THE PROGRAM	R ON THE SLIDER. A KEYPAD WILL STRENGTH SHOULD BE AT LEAST NTER ON THE BUTTON. ALCALCULATES THE CONVERSION VINUES TO CHECK CONSECUTIVE	APPEAR 10,000Bq. IFACTOR. (COUNTS/Bq) 20 SAMPLES FOR
				DFF
			SOURCE COL	INT START BUTTON
0 CALSOURCE STRE	50000	:FF_cps/Bq		SSED
Chi Square #	ТМЕ	ELAPSED TIME 00:00:08		AILED
start C:\WINDOWS\syste	untitled - Paint 🚺 LAB		ealtime VI	🔦 👯 1:31 PM

This screenshot Displays and Finds both **Background** and **Source Counts**. It is also able to Measure ant set Parameters.

AIR MONITOR-GAS, GROSS BETA-GAMMA PARTICULATE, AND IODINE MODEL # CAM-33 PROGRAM SCREENSHOTS "continued"

	С.	Figure 3.	"Nobe	el Gas Calibrat	ion" Screen
and the second se	ealtime VISIONpro - sc				
File Edit Tools	Objects Options Mail	Colors Font User Help			
▶ *₽ *∎ A *₽ *1					
CAL		N PROCEDU s channels)	JRE	GAS-1DET.C/MIN	GAS-2DET.C/MIN
STED 1.	FIND THE BACKGRO	UND COUNTS.			
STEP 1.	MAKE SURE THE NO	BLE GAS CHANNELS ARE # ISOTOPE. (SEE MANUAL)	DJUSTED	3 4 5 6 7	
	TIME KNOB. CLICK-I TO THE DESIRED VA	TING TIME ON THE B.G. CO IOLD AND DRAG THE KNOB LUE. START B.G. COUNTIN T "START BUTTON" TO "ON R ON THE BUTTON.	INDICATOR G BY	2 1 0 B.G. COUNTING TIME	
STEP 2:		NLET AND OUTLET HOSES F VING IN THE MANUAL.	ROM THE NOBLE	GAS DETETECTION SHIELD A	ND RECONNECT THEM AS PER NOBLE GAS
	CHAMBER VOLUME AFTER INJECTING T	(LITERS) AND THE PRESSU HE XENON SAMPLE INTO T	RE () OF THE INJ HE SYSTEM, CLIC	ECTED XENON TO CALCULATE	IOW THE SOURCE CONCENTRATION (Bq/cc), THE SOURCE STRENGTH IN (Bq/cc). SUTTON. WHEN YOU OBSERVE THE L
	52Bq/cc AS SOURCE	STRENGTH.			
STEP 3:	BY PRESSING THE S	ALCULATED SOURCE STRE SHIFT KEY AND DOUBLE CL ILL APPEAR, ENTER THE VA	ICKING ON THE S	SLIDER. A	MIXING IS COMPLETE!
	OURCE IS USED AS (13.	00	
ISBQ CC AS	SUORCE STRENGTH	N1EF	F_cps/Bq		
ò '	CAL SOURCE STRENGT	5000	F_cps/Bq	OFE	SATISTICAL TEST
GAS-1DET.	GAS-:		0/600 sec	CAL.SOURCE START BU	TTON
🛃 start	C:\WINDOWS\sys	e 🦉 untitled - Paint	LABTECH	NOTEBOOK 💋 LABTECH Realtin	ne VI
				• • • •	

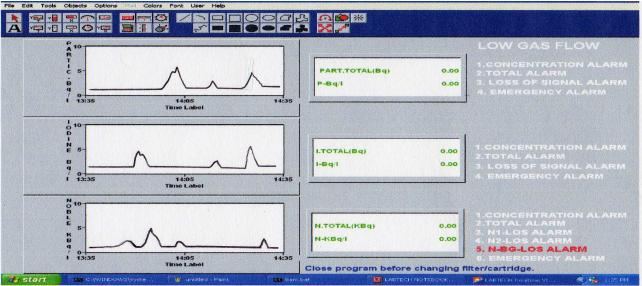
This screenshot displays **Background** Counts found through the **Nobel Gas Chamber**. **Background and Source Count** time is adjusted here as well.

Figure 4. "Particulate Calibration" Screen D. ABTECH Realtime VISIONpr 米 : 🔿 02 <u>n</u> CALIBRATION PROCEDURE (PARTICULATE CHANNEL) **STEP 1:** FIND BACKGROUND COUNTS : FIND BACKGROUND COUNTS SET THE DESIRED B.G. COUNTING TIME. B.G. COUNTING TIME CAN BE SET BY MOVING THE SLIDER OR BY HOLDING "SHIFT" AND DOUBLE CLICK ON THE KNOB OR SLIDE. A KEYPAD DISPLAY WILL APPEAR ON THE SCREEN, CLICK ON THE KEYPAD DIGITS TO SET THE NUMBER AND PRESS ENTER TO ACCEPT IT. DEF DUNTING TIME(MIN) B.G.COUNT START BUTTON START B.G. COUNTING BY SETTING B.G. COUNT START BUTTON B.G.COUNTING DONE MIN.B.G.COUNTS TO "ON". CLICK AND HOLD ON THE BUTTON. **STEP 2:**FIND SOURCE COUNTS PULL OUT THE PARTICULATE LEAD FILTER PAPER HOLDER. REMOVE THE FILTER PAPER. INSTALL THE CAL-SOURCE WITH THE SOURCE HOLDER INSTEAD OF FILTER PAPER. REINSERT THE FILTER HOLDER ALL THE WAY INSIDE THE BIG SHIELD UNTIL IT STOPS. OFF SET THE CAL SOURCE STRENGTH ON THE SLIDER BELOW BY PRESSING THE SHIFT AND DOUBLE CLICKING ON THE SLIDER. A KEYPAD WILL APPEAR ON THE SCREEN. CLICK ON THE KEYPAD DIGITS TO DISPLAY THE NUMBER AND PRESS ENTER TO ACCEPT IT. SOURCE STRENGTH SHOULD BE AT LEAST 10,000Bq. PASSED THEN START SOURCE COUNTING BY SETTING SOURCE COUNT BUTTON TO "ON". CLICK AND HOLD ON THE BUTTON. SATISTICAL TEST FAILED Bq: P-EFF_CPS/Bq **—** _____ 50000 CAL.SOURCE STRENGTH IN BQ Time Chi Squared # Elapsed Time 00.00.08 LABTECH NOTEBOOK... 📂 LABTECH Realtime VI. 🛃 start 🔿 🍇 1:32 PM 🦉 untitled - Paint C:\WINDOWS\syste

This Screenshot displays **Background and Source** counts Found through the particulate Chamber. **Background and Source Counts** are adjusted through this screen.

AIR MONITOR-GAS, GROSS BETA-GAMMA PARTICULATE, AND IODINE MODEL # CAM-33 PROGRAM SCREENSHOTS "continued"

- E. "Check Source" screen Not Shown
- **F.** "FM Graphs" screen Not Shown This creates Trend Graphs of most recent 7 Day, 30 Day and 1 Yr Readings
- G. "InstaCal Start Up" screen Not Shown



H. "Main " Screenshot

This Screenshot displays the **Particulate**, **Iodine**, and **Nobel Gas Chamber** system main functions:

- 1. Realtime Airborne Concentration Three Channels
- 2. Total Daily Release All Three Channels
- 3. All Data Archived to Disk every 2 minutes

AIR MONITOR-GAS, GROSS BETA-GAMMA PARTICULATE, AND IODINE MODEL # CAM-33 PROGRAM SCREENSHOTS "continued"

Ι.	Figure 5.	4 to 20 m	A Setup Scree	en	
Manual Contemporal	, in the second				
File Edit Tools Objects Options Mail Colors Font		▱蟲 <mark>ᅆ</mark> ๏⋇ ▰鼻 <mark>፠</mark> ╱			
4 TO 20 I	mA MAXIMU	JM RANGE			
-	P-	MAX RANGE	145.00		
0 25000 PARTICULATE MAX RANGE	50000 E (Bq/L)				
-		JAX RANGE	145.00		
0 25000 IODINE MAX. RANGE (B	50000 q/L)				
		MAX RANGE	37.00		
0 50 NOBLE GAS MAX. RANGE	100 (KBq/L)				
			CH Realtime VI	🔿 🍇 1:34 PM	
This screenshot displ	This screenshot displays the 4 to 20 mA setup for the Particulate, lodine, and				

This screenshot displays the **4 to 20 mA setup** for the **Particulate**, **Iodine**, and **Nobel Gas Chambers**. The maximum ranges for each chamber is adjustable as shown above.

J. "Batch File" Not Shown: Controls Daily 24 Hr. midnight turn over Reset of data and daily release Totals.

	K. Figure 6.	"Test" Screen	
Manual Content of the second s			
File Edit Tools Objects Options Mail Colors Font Image: State of the state of	· · · · · · · · · · · · · · · · · · ·	● 米 *	
PARTICULATE 0.00	ON	ON	TEST PROGRAM This program helps to troubleshoot the hardware. The counters read the raw
IODINE 0.00	PARTICULATE ALARM	PARTICULATE LOSS OF SIGNAL	counts in minutes. The check source when activated will give counts on all channels. To check alarms click and hold on the on-off buttons.
NOBLE GAS_1 0.00		ON	
NOBLE GAS_2 0.00	IODINE ALARM	IODINE LOSS OF SIGNAL	
BACKGROUND 0.00			
GAS FLOW: L/MIN 105.85	NOBLE GAS ALARM	NOBLE GAS LOSS OF SIGNAL	
			- 1-20 DM

This Screenshot displays the various sections of the system that are tested for troubleshooting or simply confirm they are working properly. They can be activated singly or all together for testing.