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Chapter 1: Introduction

About B-Alert™ System

The B-Alert System provides an integrated approach for wireless acquisition and recording of electroencephalographic (EEG) and electrooculargraphic (EOG) signals. The B-Alert System utilized the patented Sensor Headset and patent-pending disposable EEG sensors to acquire high quality EEG recordings. The Sensor Headset can be self-applied in less than five-minutes with no scalp preparation. The wireless technology allows the user to be untethered and move around the home or clinic while real time data is collected, displayed, and analyzed.

The B-Alert System Model 603, which provides three channels of bi-polar recordings and three channels of monopolar recordings, is recommended for use with ABM's patented B-Alert analysis software, ERP analysis software, and Alertness and Memory Profiler™ software to quantify alertness, drowsiness, memory and/or mental workload.

The B-Alert System Model 603 consists of: Head and Host Units for bi-directional transmission of digitized physiological signals, a Sensor Headset that locates EEG sensors at Fz, Cz, and POz, linked mastoids for the monopolar channels, bi-polar EOG signals, 30 disposable EEG sensors, 20 disposable EEG electrodes, conductive gel, batteries, B-Alert acquisition program, and users manual.

The Head Unit collects signals from the sensors attached to the user, performs analog-to-digital conversion, encoding, formatting and transmitting of all signals. The signals are communicated using a 902-928 MHz radio transmitter. The B-Alert software utilizes the bi-directional capabilities of the system to initiate scalp-electrode impedance monitoring, monitor battery capacity in the Head and Host Units, and select transmission frequencies. Up to five systems can be used in the same area without interference with one another.

The B-Alert acquisition program consists of several modules that allow the user to acquire, store, view, and analyze physiological signals acquired by the wireless system. The software provides a simple graphical interface for establishing and controlling data acquisition. Patented algorithms can be selected to monitor artifacts that impact signal quality in real time and sound an alarm when thresholds are exceeded. Event marks can be superimposed on the signals during data acquisition to identify in real time the presentation and response of the user to stimuli generated by the Alertness and Memory Profiler software.

This Device is not FDA approved to market and is available for non-medical use only unless it is to be used in an IRB approved program.

Package Contents

Before starting, please check to make sure your kit contains the following components:

- Sensor Headset with Sensor Strip (one medium size)
- Head Unit
- Host Unit with nine-pin serial interface
- Four AAA NiMH rechargeable batteries.
- 30 EEG sensors
- 20 disposable EEG/EOG electrodes
- Conductive cream
- EEG Sensor pry tool.
- Radio Shack Battery Charger with Adapter Cable
- B-Alert Software CD
- User's Guide
- Warranty Form (separate from User Guide)

Minimum System Requirements

- Personal computer with minimum Pentium™ 450 MHz processor (recommend Pentium™ 750 MHz or higher when using technician monitoring features);
- Microsoft® Windows 98, Windows NT 4.0, Windows 2000, or Windows XP or higher;
- Minimum of 64 MB (recommend 128 MB) of installed memory for use with Windows operating system;
- Minimum 50 MB free hard disk space;
- One CD-ROM drive
- VGA or higher resolution video adapter;
- One available RS-232 serial port;

Chapter 2: Installing Software and System Set-Up

A. Installing B-Alert Software:

1. Place the CD in your CD-ROM drive.

2. Using Windows Explorer, create a folder called B-Alert on your hard disk drive.

3. Copy the file "B-Alert ACQ.exe" from the CD to the B-Alert folder.

4. Click on "B-Alert ACQ.exe" to open the program.

5. Create a shortcut to B-Alert on your desktop.

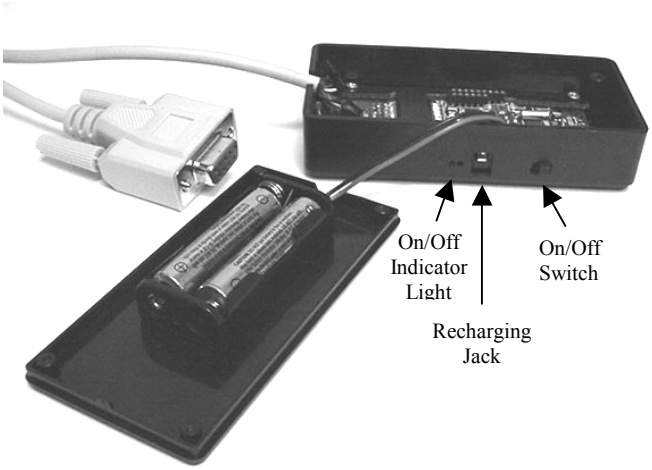
B. Preparing the Host Unit for Use:

1. Place the Host Unit on a flat surface and remove the four screws. Turn the enclosure over and remove the cover (opposite from where the screws were removed).

2. Insert two AAA batteries into the battery compartment. Make sure + and – are properly aligned.

3. Reattach the cover and tighten the screws.

4. Connect the Host Unit to the laptop or desktop computer by placing the 9-pin connector into your computer's available RS-232 serial port. Note which port is used (COM1, COM2, etc) for configuration of software. Refer to your PC's manual for information on setting up COM ports.



C. Preparing the Head Unit for Use:

1. Disconnect the battery covers, insert one AAA battery into each compartment, make sure + and – are properly aligned. Reattach the covers.

2. Insert the headset straps through the strap-holders.

3. Insert the Sensor Connector into the Head Unit with the "Push" tab facing outward.

D. Using the Head and Host Units

1. Turn the Head Unit on. The green indicator light will turn on and the red indicator light will start blinking. Note: The Head Unit must always be turned on first and turned off last for the wireless link to operate properly.

2. Place the Host Unit on its side with the on-off switch facing up.

3. Turn the Host Unit on. The green indicator light will turn on and the red indicator light will start blinking.

4. The red indicator lights on both the Head and Host Units will turn off as soon as the wireless link is established.

5. If the red indicator light continues to blink on either Unit, turn the Host Unit off, then the Head unit. Repeat steps 1 through 3.

6. To improve RF Signal Quality:
   - Make sure both Units are within 10 feet of each other, with no obstructions between them, or no metal objects nearby for the RF signals to bounce off.
   - Place the Host Unit on its side with the on-off switch facing up.
   - Reposition the Host Unit closer to the left side of the Head Unit.
   - Change RF channels and make sure no other Units are transmitting on same channel.

E. Recharging the Batteries on the Head / Host Units

The AAA Ni-MH batteries in the Head and Host Units will provide sufficient power for 7-8 hours of continuous recordings. After approximately 350 recharges, you may notice a slight reduction in the amount of continuous recording time after each charge. The batteries should be replaced after 450 charges. To recharge the batteries:

1. Make sure the Head / Host Unit is turned off (both green and red indicator lights should be off).

2. Insert the battery charger adapter cable into the recharging jack.

3. Make sure the charger is set to Ni-MH. Plug the battery charger into the wall outlet. The green light below the Ni-MH label will turn on.

4. The charger (and green light) will automatically turn off after 8-hours.

5. Unplug the charger from the wall outlet. Then remove the adapter cable from the recharging jack.

Warning: Never connect the adapter cable into the Head or Host Units when the charger is plugged into the wall outlet! This can cause the protection fuse to short. The Unit will become inoperable and must be returned to the manufacturer for repair.

F. Preparing the Sensors for Use

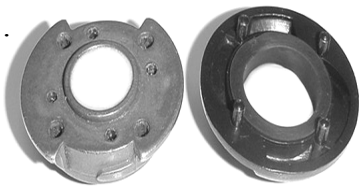
1. Fill the sensor cavity level with the top edge and the dome between 1/3 and ½ full with conductive cream. Do not overfill!

2. Align the sensor holes and the grip ring pegs so that the cut-out edge of the sensor matches the shape of the grip ring as shown in the photo below.

3. Press down slightly on the dome to make sure it is seated around the lip of the sensor. This step reduces the chance of conductive cream leaking out.

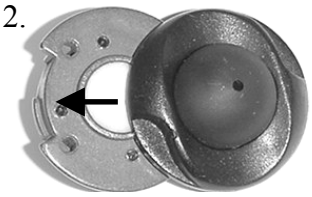
4. Firmly press together the grip ring and sensor so the edges are flush.

1.



Sensor Grip Ring & Dome

2.



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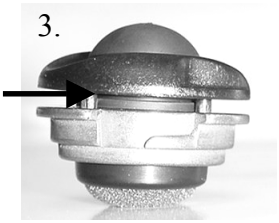
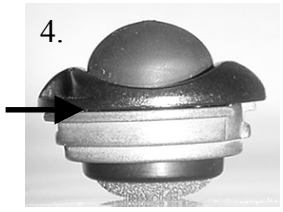


4.

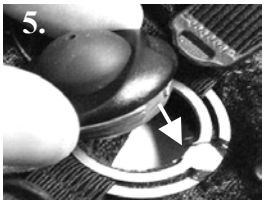


Note: Sensors can be filled with gel and stored upright in an air-tight container for later use. The conductive cream is water-based so some evaporation may occur. Do not store for more than one week.

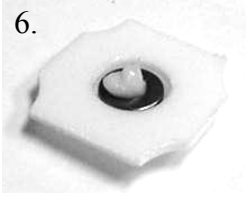
5. Align cut-out edge of the sensor with the notch on the stainless steel ring and insert. Twist the sensor clockwise slightly approximately 2 mm. Do not over-tighten the sensor.

6. Add a small amount of conductive cream to the electrodes to be used for the mastoid and EOG sites. Note: DC potentials may occur if the same conductive cream required with the EEG sensors is not used with the EEG/EOG electrodes.

5.



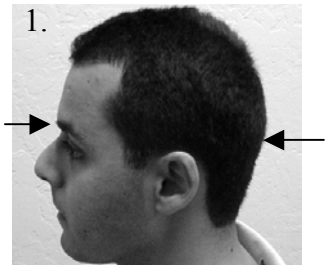
6.

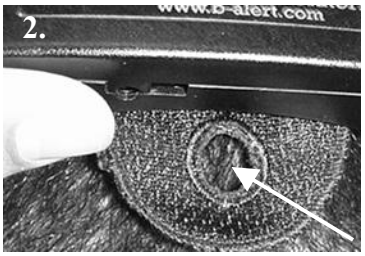


G. Applying the Sensor Headset

1. Measure the distance from the nasium to the inion and select the appropriate Sensor Headset size.

Size	Nasium - Inion
Small	32.0 – 34.5 cm
Medium	35.0 – 37.0 cm
Large	≥ 37.5 cm



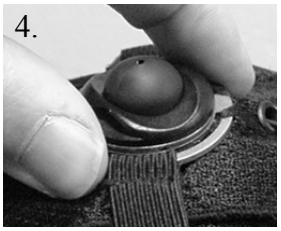


2. Make sure all of the sensor straps are loose. Place the headset on from front to back, center the sensor holes, and adjust the Sensor Headset until you can feel the inion below the alignment hole (under the Head Unit).

3. Tighten the headset straps until the Headset is secure, yet comfortable.

4. Lift up on the conductive rings so that the Sensor is approximately ¼ inch above the hair. With your finger over the hole, press slowly on the rubber dome until the conductive cream is felt on the scalp. Release the conductive ring.

5. Pull gently outward on the sensor straps to increase tension on the Sensor against the scalp. Lift up on the quick-release strap holder to decrease tension.



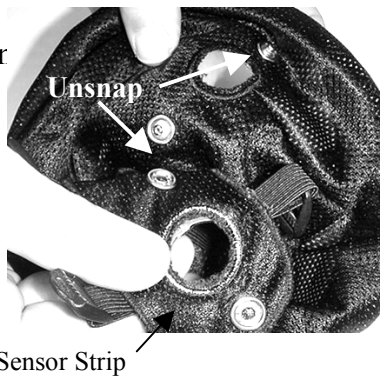
H. Care for the Sensor Headset

1. Disconnect the sensor connector (see photograph in Section C) ar Head Unit from the Sensor Headset.

2. Disconnect the four snaps and remove the sensor strip.

3. Hand-wash the Headset and air dry.

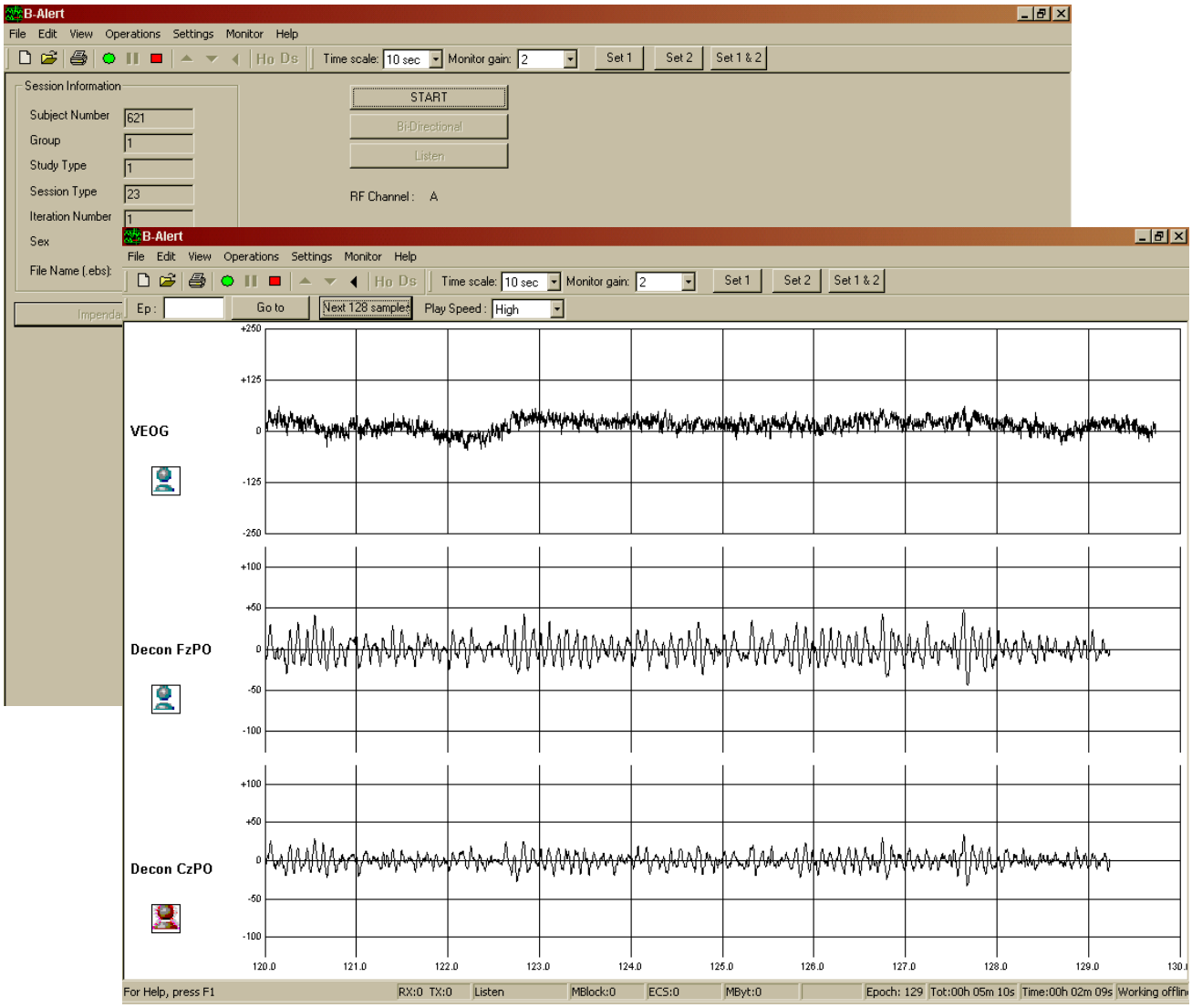
4. Reconnect the sensor strip and repeat steps C2 and C3.



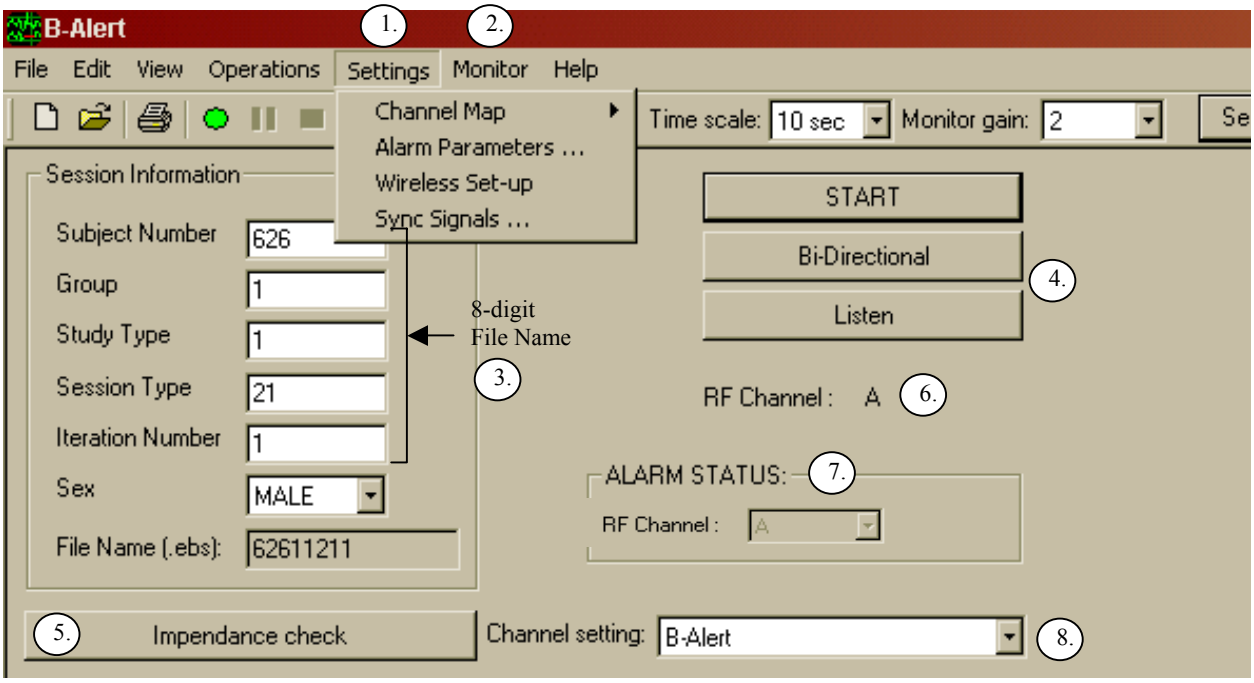
Chapter 3: Recording and Viewing Physiological Data

A. Introduction to B-Alert Software

The B-Alert Software provides the capability to acquire, store, view, and analyze analog signals during acquisition. In addition to viewing the EEG and EOG signals, the software provides the capability to analyze the signals in real time, allowing the user to monitor artifacts and other problems that can affect signal quality. This feature allows analog signals to be optionally monitored after identification and decontamination of eye blinks, muscle artifacts, amplifier saturation and dropped packets across the RF link. Thresholds can be selected to trigger an alarm that alerts the technician when excessive amounts of artifact are being recorded. In addition to monitoring artifact, the B-Alert software can notify the technician of low battery levels in the Head and Host Units and high scalp-electrode impedances. The program can also present vertical marks in the record during certain tasks to identify when a stimulus is presented and when the user responds.



B. Main Screen



The features of the Main Screen for the B-Alert Software include:

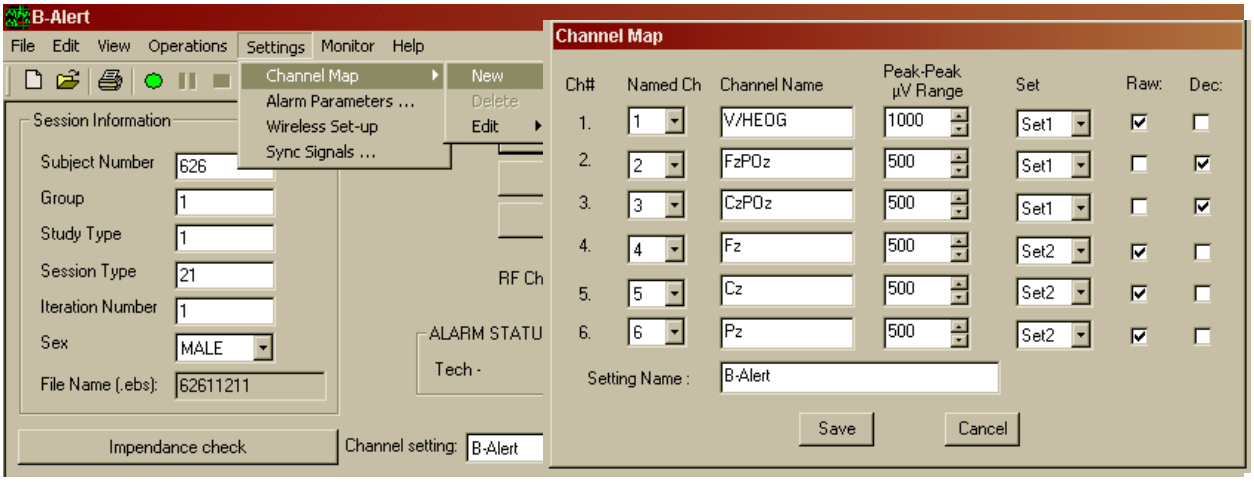
1. The "Settings" menu option provides the capabilities to configure the hardware.
2. "Monitor" allows adjustment to the presentation of the signals during recording.
3. "Session Information" is designed to generate a unique file name for the recording.
4. "Bi-Directional" wireless transmission mode should normally be selected, so that the host computer can provide commands to the Head Unit. The "Listen" mode should only be used to monitor signal quality in conjunction with ABM's Alertness and Memory Profiling Software.
5. The "Impedance Check" button will initiate the automated measurement of all scalp/skin- electrode impedances.
6. "RF Channel" shows the channel selected in the "Wireless Set-Up" menu option.
7. The "Alarm Status" displays selections made using the "Alarm Parameters" menu option. The Tech Alarm provides notification when excessive artifact is being acquired. The B-Alert Alarm provides real-time drowsiness monitoring feedback.
8. "Channel Setting" allows the technician to select the channel configuration set up with the "Channel Map" menu option.

C. Setting Menu Options

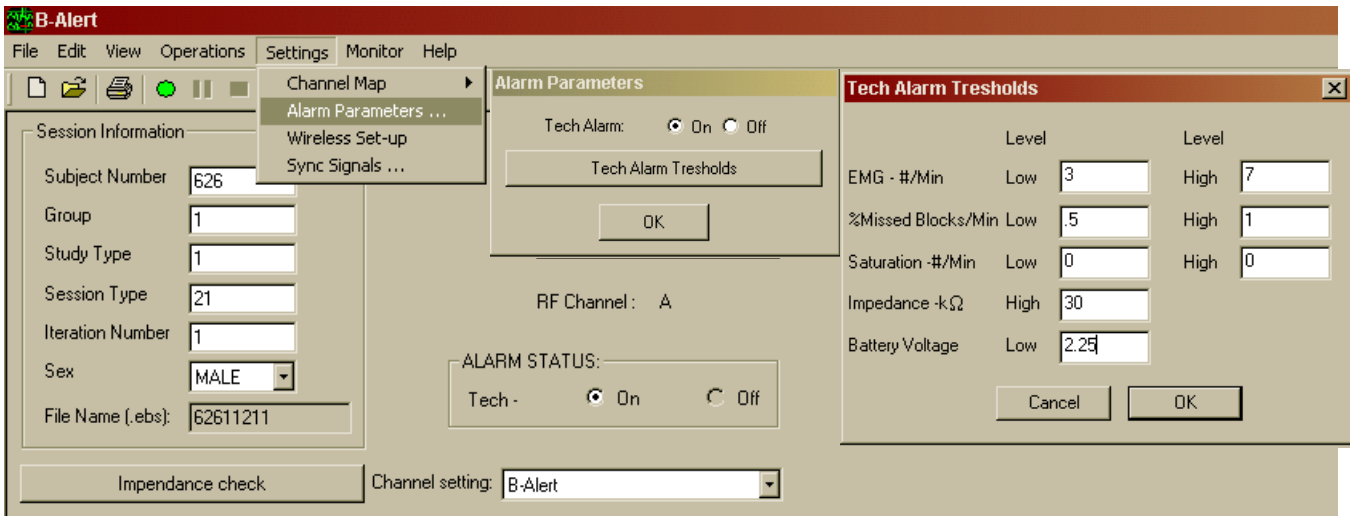
Channel Map:

- The Channel Map screen allows the six physical channels to be assigned channel numbers (Named Ch.) that orders the presentation of each channel.
- The Peak-Peak setting determines the initial dynamic range of the channel when presented to the monitor.

- Channels can be grouped into Set 1 or 2, allowing the technician to toggle between either group of channels during data acquisition.
- The Raw and Dec. option presents the signals without and/or after decontamination. The processing power of the CPU will affect how many channels can be presented in the decontamination mode. More instructions are provided below for the selection of decontaminated signals.



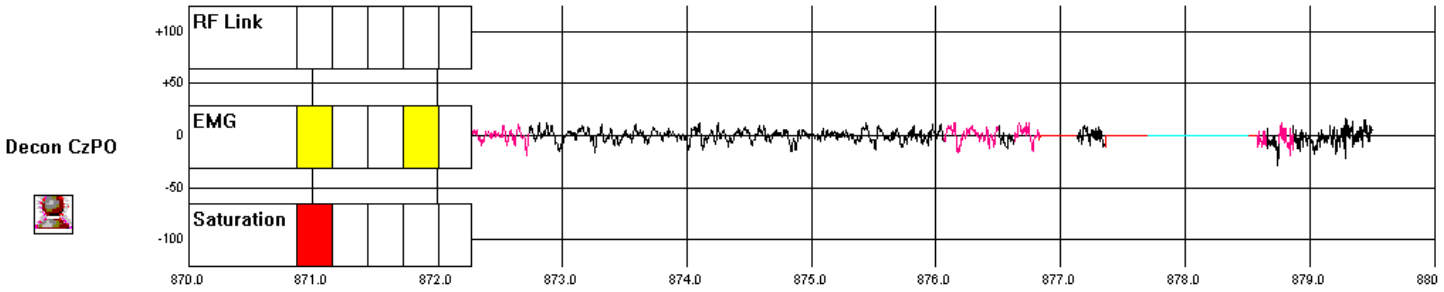
Alarm Parameters: One of two Alarm options can be selected to provide real-time feedback.



- The Tech Alarm Thresholds provide the capability to adjust the settings for high and low and levels of artifact, impedance levels or battery voltage that triggers the Tech Alarm.
- The audio Tech alarm sounds and the Tech Alarm icon flashes when high levels of artifact and impedances, or low battery voltages are measured.
- Setting a threshold to zero means that the Tech Alarm will not be triggered by that threshold. In the example above, the low and high thresholds for number of epochs per

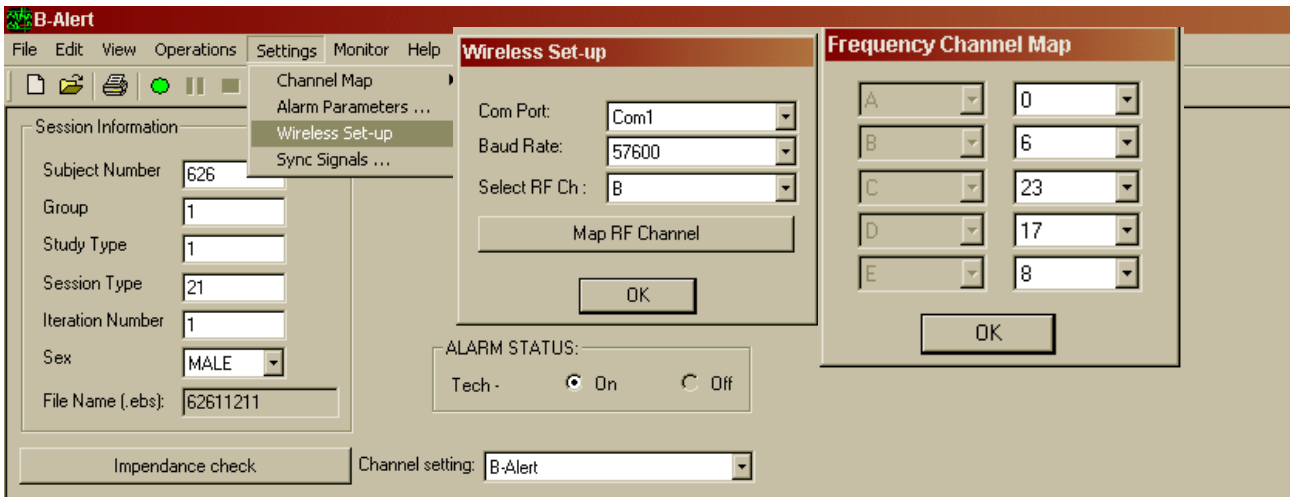
minute with saturation are set to zero, therefore, saturation levels will not be used to trigger the Tech Alarm.

- Click on the Tech Alarm icon to turn off the alarm and view the five-minute history of levels of artifact that exceeded the thresholds (most recent minute toward the left).



Wireless Set-up:

- The Com Port assigned to the serial port for the Head Unit needs to be selected.
- The Baud Rate is fixed and cannot be changed.
- The Head and Host Units are pre-set to provide high quality transmission with up to five systems operating in the same environment (as long as each system is transmitting on a different channel).
- The Frequency Channel Map allows the user to link the five available RF frequencies with five RF channel names.

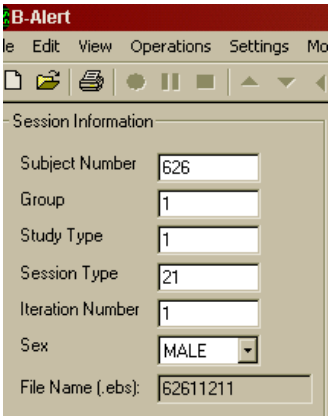


Synchronize Data: The B-Alert software can incorporate additional serial inputs into the EEG record to assist with file synchronization during off-line analysis. Press the Default button to set the standard configuration that is applied each time the software is opened.

- The Horita option incorporates time codes generated by the Horita TRG-50 PC that can be simultaneously recorded on VHS tape. (see: http://www.horita.com).
- The Driving Simulator option incorporates performance measure outputs from STISIM program (see: http://www.systemstech.com).

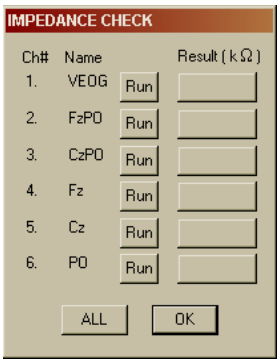
D. Selecting File Name

The B-Alert software assigns an eight-digit file name using information inputted in Session Information. All session information fields default to zero.



- Subject Number: three digits - zeros will be automatically inserted if less than three digits are inputted.
- Group: one digit – intended for use with counter-balancing protocols.
- Study Type: one digit – for subjects repeatedly tested under different conditions.
- Session Type: two digits – must assign 11 (Eyes Open), 12 (Eyes Closed) and 23 (3-choice Psychomotor Vigilance Task) for the B-Alert baseline conditions.
- Iteration Number: one digit – ideal for use when two or more sessions with the same session type are recorded on the same day.

E. Impedance Monitoring

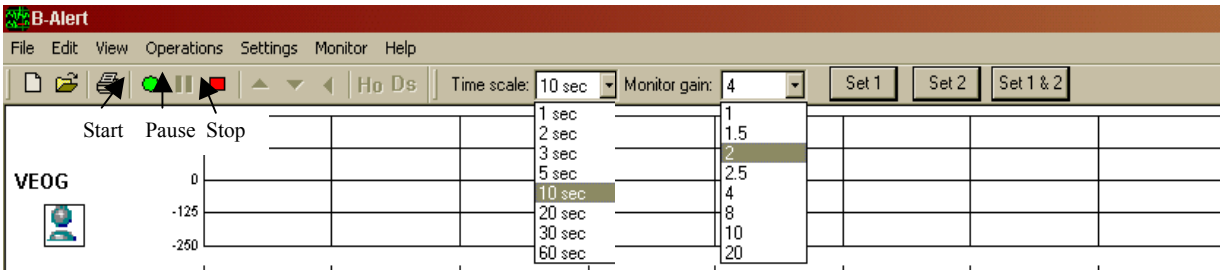


Click on 

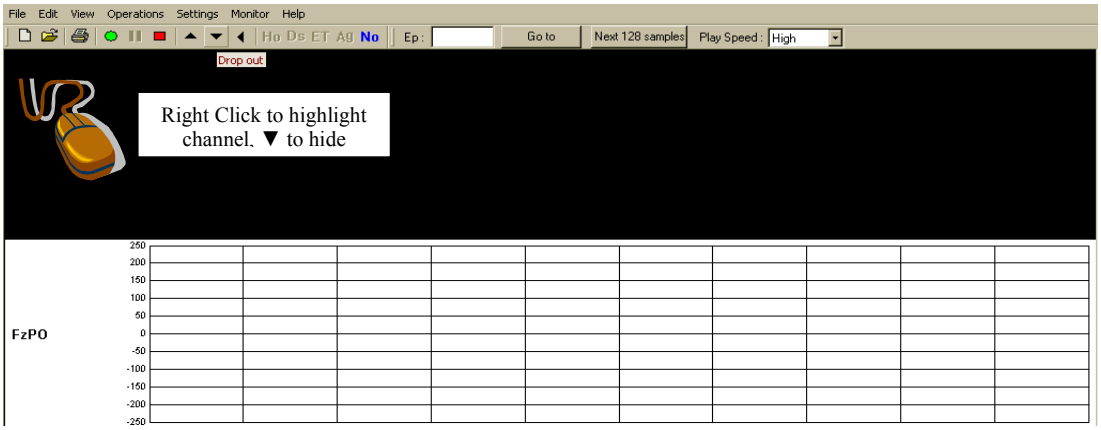
then click "All" to run impedance on all channels or perform impedance on individual channels by selecting "Run". If the Tech Alarm is turned On, audio and visual notifications will be presented if an impedance level exceeds the Tech Alarm threshold.

F. Acquiring or Off-Line Viewing of Signals

- To begin data acquisition, input the File Name and press Start on the Main Screen.
- To view an existing record, left click on File, select and double click on the file name to viewed. Press Start on the Main Screen.
- Adjust the time scale to select the number of epochs to be presented to the screen.
- The monitor gain increases the resolution of the signal in proportion to the peak-peak settings established in the Channel Map.
- To change the number of horizontal lines in each channel for recognition of the microvolt level of the signal, select Monitor, Monitor Properties, and Signal Panes. Major presents two lines above and below the zero line (see example below). Minor presents four lines above and below the zero line.
- Use the Start, Pause and Stop buttons for recording.
- Select Set 1, Set 2 or Set 1 & 2 to present the channels assigned to the respective sets in the Channel Map.

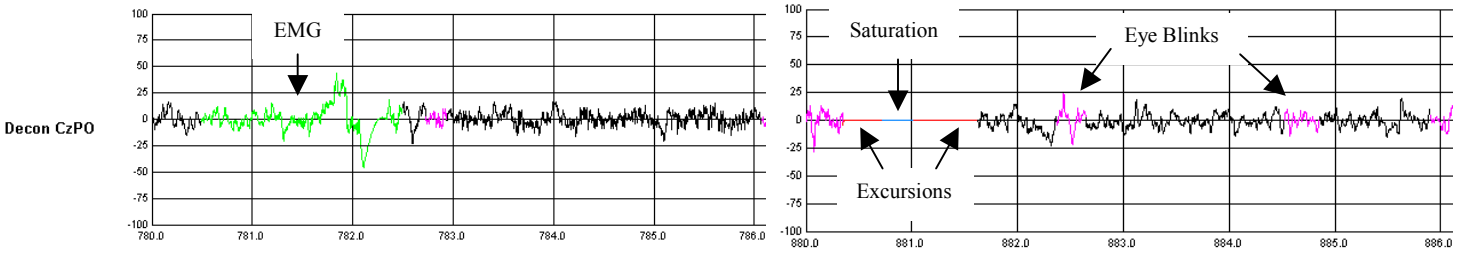


- Channels can be selectively hidden so that the remaining channels appear larger on the screen. If you wish to hide a channel left click (in the general area of the channel) to highlight the channel to be hidden (Left click a second time to un-highlight). To hide the highlighted channel, select the ▼ or right click. Select ▲ to unhide the channel. Select ◄ to present all channels in the set.

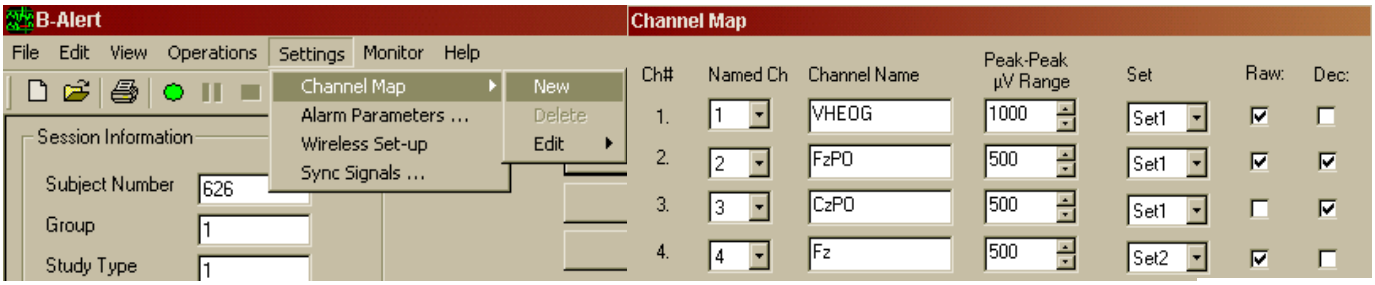


F. Viewing Decontaminated Signals:

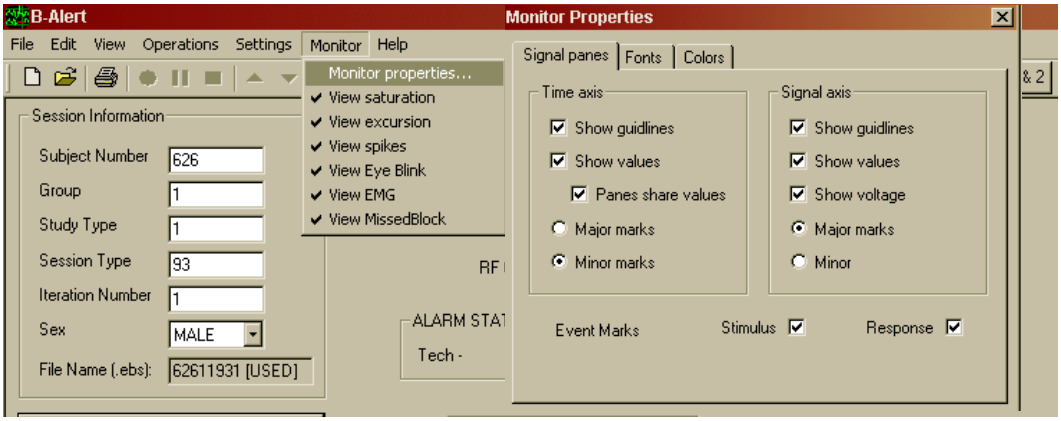
The B-Alert software provides the capability to view decontaminated EEG signals. Decontaminated signals are filtered with a 0.5 Hz FIR filter, and signals affected by artifact are colored after decontamination. Channels that the User wishes to view as decontaminated, must be selected in the Channel Map prior to the start of the recording. Three steps are involved in configuring the presentation of Decontaminated signals.



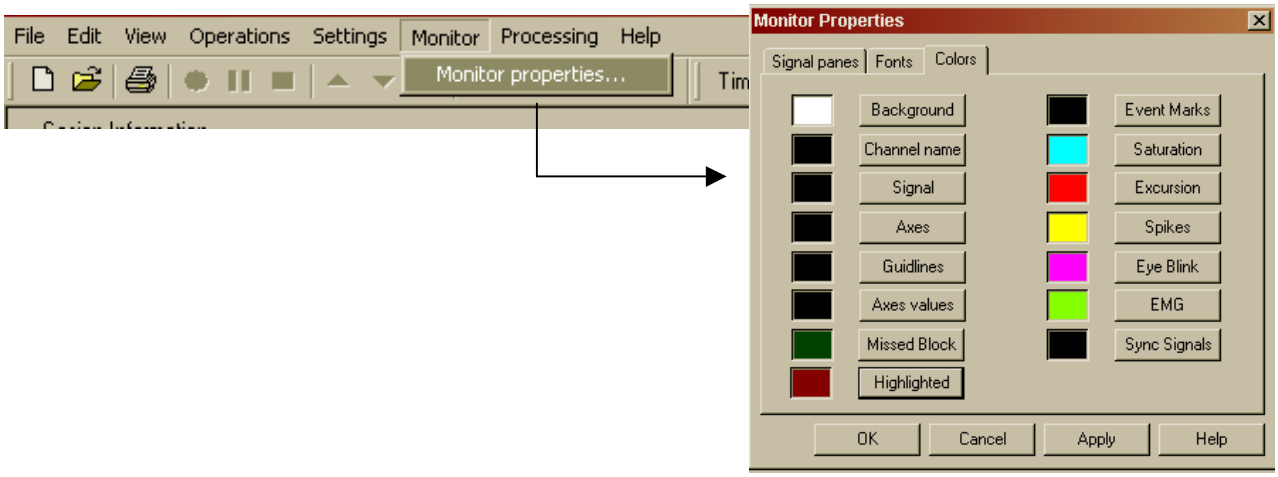
1. For the Channels of interest, select Dec in the Channel Map.



2. Check the artifact routines that you wish to have visually presented and/or stimulus and/or response markers generated by the Alertness and Memory Profiling Software. These markers can be used to monitor when the subject is responding to the task.



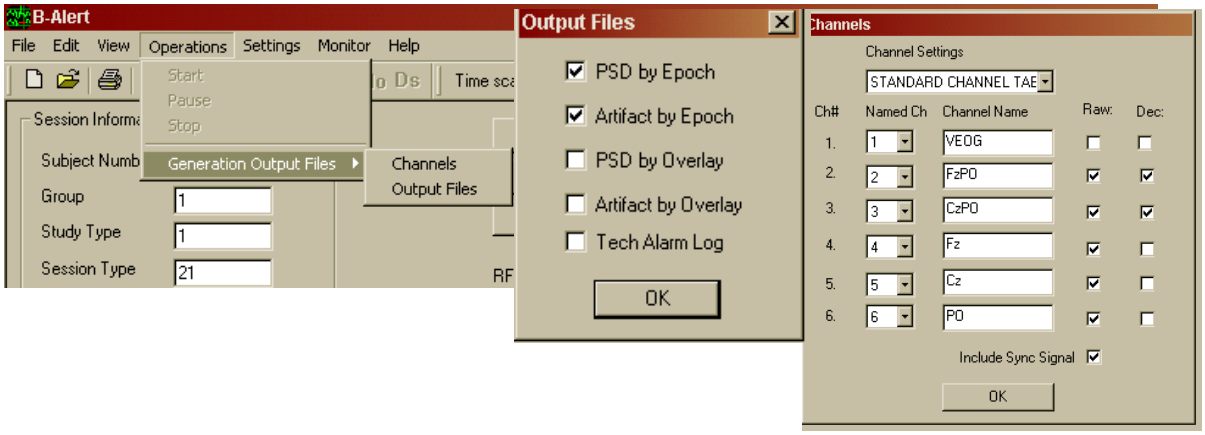
3. Select the coloring scheme of the artifact-affected signals.



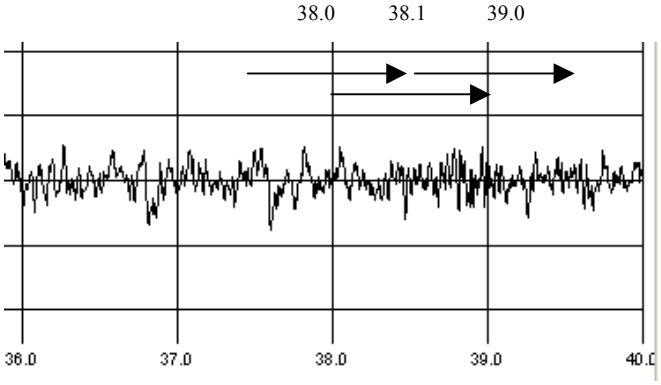
Chapter 4: Generating Output Files

The B-Alert software provides the capability to generate output files that can be used for data analysis purposes. Output files include power spectral density (PSD) calculations for each one Hz bin from 1 to 40 Hz and Artifact that was detected using the B-Alert algorithms.

The "Epoch" option utilizes a 50% overlapping window which averages PSD calculations from three 256 data point overlays from 0.5-secs prior to and 0.5-secs after the epoch of interest. For the "Overlay" option PSD and Artifact data are reported for each 256 data point window.



To compute the PSD for Epoch 38 in the example below, the values obtained from overlays 38.0, 38.1, and 39.0 are averaged. Alternatively, the PSD values for each overlay can be generated.



Using the Channels option, PSD results can be generated without (Raw) or after Decontamination (Dec). If Dec is selected, the PSD in the range from 1 to 9 Hz will be labeled Dc instead of Hz, reflecting the impact that the eye blink decontamination routine has on these frequencies. The Artifact file indicates when fast or slow blinks are identified. Because zero values replace the data points that are affected by amplifier saturation, spikes or excursions that result from saturation, the INV column in the Artifact file indicates that zero values were inserted in 128 or more data points, which resulted in invalid data for that overlay. When invalid data is determined, 99999 is inserted in the

PSD file. Three levels of EMG are identified, however, level three is generally the only level that should be excluded from analysis.

Unique output files will be generated for each channel selected. In the example above, both PSD and artifact files were selected, with raw results for all EEG channels and decontaminated for the two bi-polar channels. For this request, the following file names would be generated:

8-digit file name_FzPO_raw_ep.psd
8-digit file name_FzPO_dec_ep.psd
8-digit file name_CzPO_raw_ep.psd
8-digit file name_CzPO_dec_ep.psd
8-digit file name_Fz_raw_ep.psd
8-digit file name_Cz_raw_ep.psd
8-digit file name_PO_raw_ep.psd

8-digit file name_FzPO_ep.art
8-digit file name_CzPO_ep.art
8-digit file name_Fz_ep.art
8-digit file name_Cz_ep.art
8-digit file name_PO_ep.art

Format of Artifact by Overlay: 53411111_FPO_ep.art

Sessnum	epnum	Sex	SatFPO	EMGFPO	INVFPO	epclass	FastBlk	SlowBlk
53411111	37	0	0	0	0	0	1	0
53411111	38	0	1	0	1	0	0	0
53411111	39	0	1	3	0	0	0	0
53411111	40	0	0	0	0	0	1	0
53411111	41	0	0	0	0	0	1	0

Format of Decontaminated PSD by Overlay: 53411111_FPO_dec_ov.psd

Sessnum	epnum	Sex	Dc1FPO	Dc2FPO		Dc9FPO	Hz10FPO		Hz39FPO	Hz40FPO
53411111	37.0	0	0.443846	1.002631		-0.034824	0.493816		-0.141100	-0.432520
53411111	37.1	0	99999	99999		99999	99999		99999	99999
53411111	38.0	0	99999	99999		99999	99999		99999	99999
53411111	38.1	0	99999	99999		99999	99999		99999	99999
53411111	39.0	0	99999	99999		99999	99999		99999	99999
53411111	39.1	0	0.654632	0.979675		-0.677170	0.668683		0.642560	0.432266
53411111	40.0	0	0.475813	0.862993		1.066940	0.680225		-0.473269	-0.438904
53411111	40.1	0	0.775692	0.856615		0.406896	0.590719		-0.371120	-0.711514

B-Alert Model 603 Specifications

System Specifications - for Head and Host Units	
RF Band	902 – 928 MHz (ISM band)
Antenna	On-board
Transmission Rate	Bi-Directional @ 57.6 K bits/sec
Data Transmission Range	~ 20 feet, line of sight
Average Data Loss	< 0.1%
Transmission Power	~ 1 mW
Number of RF Channels	Five
Power Supply	2 x AAA 750 mAH NiMH batteries in each Unit
Operating Time	7.0 hours between charges
Battery Charger	External, interface via Charging Jack
User Control	ON/OFF
Indicator LEDs	Green = in sync with head unit Red = device on but not in sync with Head Unit
Operating Condition	Humidity: 5% to 90% (non-condensing) Temperature: 50 – 85^{o} F
Case Material	ABS
Host Unit	
Dimensions	4” long x 2” wide x 1” deep
Weight	3.6 ounces with batteries
Power Consumption	80 mA @ 3.3 V
Cable Interface	9-pin jack connected directly to PC’s RS232 port via 30” serial cable
Head Unit	
Dimensions	5” long x 2.25” wide x 1” deep
Weight	4.0 ounces with batteries
Power Consumption	80 mA @ 3.3 V
Number of channels	Six: 3 x bi-polar and 3 x uni-polar
Sampling Rate	256 samples/second
Dynamic range	$\pm$ 1,000 µV, sufficient for either EEG or EOG
Resolution	16 bit
Bandpass characteristics	0.5 Hz and 65Hz (at 3dB attenuation) obtained digitally with Sigma-Delta A/D converter
Noise	~ 2 µV peak to peak
On-line impedance monitoring	Initiated by host computer using bi-directional link
Connector Interface	12-pin Hi-Rose connector for Sensor Headset
Software	
Compatibility	Personal computer with Pentium/MMX 450 MHz or higher processor (or equivalent) wth Windows Operating System
Estimated File Size per Minute	~ 184 KB/Min

B-Alert Model 603 Specifications (continued):

Battery Charger	
Dimensions	5” long x 2.25” wide x 2.25” deep
Weight	9 ounces
Power Supply	110 volt AC
Cable Interface	4’ adapter cable with charging jack
Sensor Headset and accessories	
Headset and Sensor Strip	Medium = Nasium to Inion ~36 cm. From Inion: POz = 7.2 cm, Cz = 18 cm and Fz = 25.2 cm
Sensors	Silver-Silver Chloride coated ABS
Electrode Cream	Highly conductive, electrolytes and preservatives in non-ionic, hypo-allergic base, buffered to skin pH
EEG Sensor pry tool	2” long

Preliminary Specifications, subject to change.

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesirable operation.

Caution: Changes or modifications not expressly approved by Advanced Brain Monitoring, Inc. could void the user's authority to operate the equipment.

Trademark Acknowledgements

B-Alert is a registered trademark of Advanced Brain Monitoring, Inc., Carlsbad, CA.

Windows is a trademark of Microsoft Corporation.

All other products or brand names are trademarks or registered trademarks of their respective companies.

Software License Agreement

IMPORTANT – READ CAREFULLY THE FOLLOWING SOFTWARE LICENSE AGREEMENT ("LICENSE") BEFORE BREAKING THE SEAL ON THE SOFTWARE PACKAGE CONTAINING THE DISKETTES. BREAKING THE SEAL CONSTITUTES YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS LICENSE WITH RESPECT TO THE USE AND POSSESSION OF THE SOFTWARE CONTAINED THEREIN.

IF YOU DO NOT WISH TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS LICENSE, PROMPTLY RETUN THE PACKAGE WITH THE SEAL INTACT ALONG WITH THE B-ALERT PRODUCT TO WHICH IT APPLIES.

ADVANCED BRAIN MONITORING, INC. retains full ownership rights to the software program ("Program") and documentation and upon payment of the purchase price of the B-Alert product grants to the Purchaser a nonexclusive license subject to the following conditions:

This Program may be used with the B-Alert product to which it applies. The Purchaser may install the Program on only one computer, make one copy in machine readable form solely for backup purposes, provided that you reproduce all proprietary notices on the copy; and physically transfer the Program from one computer to another provide that the Program is used only on one computer at a time. The Purchaser may not copy, distribute, rent, lease, sub-license, transfer or use the Program except as allowed herein. In Addition, the Purchaser may not alter, modify, decompile, translate, disassemble the Program; or use it to create a derivative work.

Purchaser's right to use this Program automatically terminates upon failure to comply with any provision of this License or upon your destruction of all copies of the Program and documentation.

If Purchaser purchases an upgrade version of the Program, either separately or with a B-Alert product purchase, it constitutes a single product with the Program that you upgraded.

This License is deemed made, accepted and delivered in the State of California and shall be construed, interpreted and governing by the laws of the State of California, without regard or effect given to its or any other jurisdiction's conflicts of law jurisprudence.

Software Limited Warranty

ADVANCED BRAIN MONITORING, INC. warrants for a period of 90 days from the date of delivery to the Purchaser that the Program diskette will be free from defects in material and workmanship under normal use. In the event Purchaser within the warranty period notifies ADVANCED BRAIN MONITORING, INC. of defects in material or workmanship, ADVANCED BRAIN MONITORING, INC. exclusive remedy will be to replace the defective diskette.

ADVANCED BRAIN MONITORING, INC. SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO DEFECTS IN THE DISKETTE AND THE PROGRAM. IN NO EVENT SHALL ADVANCED BRAIN MONITORING, INC. BE LIABLE FOR ANY LOST PROFIT OR ANY OTHER COMMERCIAL DAMAGE, INCLUDING, BUT NOT LIMITED TO, SPECIAL, INCIDENTIAL, CONSEQUENTIAL OR OTHER DAMAGES EVEN IF ADVANCED BRAIN MONITORING, INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states/jurisdictions do not allow limitations on the duration of the implied warranty, so the above limitation may not apply to you.

To return Program diskette to ADVANCED BRAIN MONITORING, INC. under a warranty claim, the Purchaser must first contact ADVANCED BRAIN MONITORING, INC.'S Customer Support at (866) 677-2737 and receive a Return Merchandise Authorization (RMA) number. Purchaser must place the RMA number on the outside of the package containing the diskettes being returned and ship the package to ADVANCED BRAIN MONITORING, INC.'s facility, freight prepaid. Any return diskette received by ADVANCED BRAIN MONITORING, INC. without a RMA number shall be sent back to the Purchaser.

Product Limited Warranty

ADVANCED BRAIN MONITORING, INC. warrants the B-Alert products are to be free from defects in material and workmanship under normal use and service for a period of 90 days from the date of delivery. The obligation of ADVANCED BRAIN MONITORING, INC. under this warranty is limited to repair, re-work or replacement at ADVANCED BRAIN MONITORING, INC.'s option, of any B-Alert product which within the 90 days from date of delivery is examined by ADVANCED BRAIN MONITORING, INC. and discloses to ADVANCED BRAIN MONITORING, INC.'s satisfaction to have been defective.

For this warranty to be available to Purchaser, within 14 days of purchase ADVANCED BRAIN MONITORING, INC. must have received a completed warranty card.

ADVANCED BRAIN MONITORING, INC. will not be responsible for, and the warranty shall not apply to, any damage caused by the following: natural disasters, war, civil disturbances, abuse, misuse, negligence, usage of incorrect electrical supply voltage, usage not in accordance with the operation instructions manual, or normal wear and tear.

This warranty shall not apply to any B-Alert product which as been repaired, services, disassembled or modified by any party other than ADVANCED BRAIN MONITORING, INC. or the warranty card has been tampered with. No warranty claim will be allowed for B-Alert products damaged by improper use, operation or handling after deliver of the B-Alert product. Purchaser must file all claims resulting from damage in transit with the carrier or carrier's agent. Expenses incurred in connection with claims for which ADVANCED BRAIN MONITORING, INC. is not liable may be charged to the Purchaser.

Upon submission of a warranty claim, Purchaser is deemed to have waived any and all other claims against ADVANCED BRAIN MONITORING, INC.. ADVANCED BRAIN MONITORING, INC. shall in no event be liable to Purchaser or to the Purchaser's customers for any incidental or consequential damages, loss of use or other commercial loss, however occasioned.

ADVANCED BRAIN MONITORING, INC. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTIABILITY, FITNESS FOR PARTICULAR PURCHASE OR PERFORMANCE CHARACTERISTICS, EXCEPT TO THE EXTENT SET FORTH HEREIN.

Returns

To return a B-Alert product to ADVANCED BRAIN MONITORING, INC. under a warranty claim, the Purchaser must first contact ADVANCED BRAIN MONITORING, INC.'S Customer Support at (866) 677-2737 and receive a Return Merchandise Authorization (RMA) number. Purchaser must place the RMA number on the outside of the package containing the B-Alert product being returned and ship the package to ADVANCED BRAIN MONITORING, INC.'s facility, freight prepaid. Any returned a B-Alert product received by ADVANCED BRAIN MONITORING, INC. without a RMA number shall be sent back to the Purchaser.

Advanced Brain Monitoring, Inc. Customer Support

If you have any questions regarding this product, please first refer to this User's Manual. To obtain warranty service, you must call ADVANCED BRAIN MONITORING, INC. and speak with a Customer Service Representative. Be prepared to provide: 1) your name, address and telephone number, 2) the B-Alert model and serial numbers, and 3) an explanation of the problem.

Telephone: (760) 720-0099 or Toll-Free (866) 677-2737
9 AM to 5:30 PM Pacific Time
Monday – Friday

Fax: (760) 720-0094

Email: Support@B-Alert.com
Web: http://www.b-Alert.com

Mailing Address: 2850 Pio Pico Drive, Suite A
Carlsbad, CA 92008

Warranty Information

(Retain this information for your records)

ADVANCED BRAIN MONITORING, INC. thanks you for your recent product purchase. For your benefit, we recommend that you record the pertinent details below. This information will be needed to submit a warranty claim or obtain service.

B-Alert Model Number: _____

Serial Number: _____

Date of Purchase: _____