



4.2.2 Compliance Setup – Series II, Series III and Micromate

NOTE: The **Series IV Compliance Setup** is covered in the next section.

This section of the manual reviews the **Compliance Setup** for **Series II**, **Series III** and **Micromate** units. To display the Compliance Setup preferences window select the **Unit Type** and then the **Unit Menu, Setup**, and then **Compliance Setup**. The associated **Compliance Setup** dialog which appears has several tabbed dialogs; Recording Setup, Notes, Special Setups, Printer Setup (Series III monitors only), and Setup Files. In the lower, right hand corner of this window, there is a message that either states “PC is not attached to a unit.” or a comparison of the operating system version. Example: “Operating system version 4.33 on unit, 8.0 on disk.” For the best results while using the Compliance Setup window, ensure that the two versions match. To update the unit operating system, refer to the Reload Operating System section in this manual.

After making changes within any given tabbed Setup dialog, you have the choice to either reject the changes by clicking on **Cancel**, which exits the Compliance Setup, or accept any changes by clicking on **Send to Unit**, which will update the settings on the attached unit.

The dialog will initially contain the settings of the attached unit.

a. Micromate Recording Setup

Note: The **Recording Setup** for **Series II** and **III** is covered in the next step.



(1) Recording Mode

The record mode sets how the monitor records Events. To choose a recording mode, click on the **Recording Mode** drop-down menu and select one of the following recording modes:

i Waveform

Use Waveform Record Mode to record multiple Events automatically with no dead time between Events. The monitor records an Event, displays the results, and continues to monitor, ready to record following Events. The monitor records all Events whose activity exceeds the preset trigger level.

ii Waveform Manual

Use Waveform Manual Record Mode if automatic triggering is unreliable, due to excessive wind or nearby vehicle activity, or to record the background noise level in the vicinity of a site. Recording can be initiated from the Unit Monitor Status dialog.

iii Histogram Record Mode (Strip Chart)

Use the Histogram Record Mode for long-term recording periods such as monitoring of pile driving operations.

In Histogram Record Mode, the monitor stores summary information in intervals. The monitor continues to sample data continuously at the chosen sample rate but only stores the relevant peaks for the interval. This reduces the data recorded and greatly increases the monitors storage capacity. For each interval, the monitor calculates the maximum peaks, the frequency of the largest peak, and the peak vector sum. For each channel, the maximum peak and its frequency are calculated. Also the largest peak vector sum is calculated over the entire Event. Histogram Record Mode displays the peak of each interval in a bar chart, while tabular format represents the peaks as numbers.

iv Histogram Combo Mode

The Histogram Combo Mode creates a waveform recording during a Histogram recording if the signal exceeds the waveform trigger level. The waveform Event is saved as a separate file while



the Histogram Event file remains continuous, only limited by the amount of available memory. The auxiliary trigger is automatically disabled during Histogram Combo Mode. The maximum sample rates in this mode are 1024, 2048, and 4096.

(2) **Record Stop Mode**

The Record Stop Mode sets how the monitor stops recording after being triggered. Select a Record Stop Mode if you are using Waveform or Histogram Combo Record Modes. You can choose between a **Fixed Record Time** setting or an **Auto Record** setting. **Fixed Record Time** sets the record time to a specified length. Once the record time has elapsed, the monitor stops recording. In **Auto Record**, unlike the **Fixed Record Time**, the monitor continues to record Event activity as long as that activity remains above the trigger level (sufficient memory and battery power must be available). Recording stops a specified period of time after the Event activity falls below the trigger level. Use the **Auto Record** mode if you are unsure of the actual Event duration.

To Select a Record Stop Mode, position the mouse pointer on the **Record Stop Mode** drop-down menu and click the mouse button. Choose **Fixed Record Time** or **Auto Record**.

(3) **Sample Rate**

The monitor has three sample rates; standard (1024 samples per second), fast (2048 samples per second), and faster (4096 samples per second on channels 1 to 4 only). The choice of a sample rate depends on the type of monitoring you are conducting. Increasing the sample rate increases the accuracy of the waveform recording. For this reason, set the sample rate according to the location of the standard transducer or the Micromate. For close-in or near field monitoring, set the sample rate to 4096 samples per second. For far-field monitoring, set the sample rate to 1024 samples per second. Increasing the sample rate also increases the amount of memory required to store Events and reduces the number of Events that can be stored on the monitor. It also reduces the battery life.

To choose a recording rate, click on the **Sample Rate** drop-down menu. Click the mouse pointer on the required sample rate. The maximum sample rates in this mode are 1024, 2048, and 4096.

(4) **Record Time**

This setting changes between record times depending on the Record Stop Mode chosen above. If you chose **Fixed Record Time**, enter a time in seconds in the Record Time box.

(5) **Histogram Interval**

Set the Histogram Interval if Histogram or Histogram Combo Record Mode was chosen. The Histogram Interval is the period of time the monitor records Event information before applying the data analysis techniques. For each interval, the monitor calculates the maximum positive or negative peaks, the frequency of the largest peak, and one peak vector sum. For each channel the maximum peak and its frequency are displayed in the summary data. The maximum peak vector sum is calculated over the entire Event is also displayed. Select the drop-down list to set the desired Histogram Interval time.

(6) **Enable Standard Geophone**

The Geophone channels record ground vibrations. In this section of the dialog box, you enable the geophone channels by selecting the **Enable Standard Geophone** option.

i **Enable Trigger**

Click on the **Enable Trigger** checkbox to use the geophone channels as a Trigger Source. For example, when selecting the geophone as a trigger source, Event recording begins on all these channels when Event activity exceeds the Trigger Level of the geophone. Refer to Trigger Level, below.

ii **Trigger Level**

The Trigger Level sets a threshold that must be exceeded by an Events activity before the monitor begins recording. Use your judgment when setting a Trigger Level. You must set the level high enough so the unit does not trigger on unwanted Events such as nearby vehicle traffic. At the same



time, you have to set the trigger level low enough so that an Events activity exceeds the trigger level and starts the unit recording.

To set a trigger level, click on the **Trigger Level** box. Enter the new level.

Note: In certain situations, the actual trigger level may be lower than the trigger level that you entered. This is because the monitor converts the analog signal it receives from the geophone into digital data, which consists of a series of discrete values. If the trigger level that you entered does not match one of these values, Blastware automatically sets the trigger level to the nearest lower value.

The available Trigger Level range is 0.127 – 254.0 mm/s.

(7) Enable ISEE Microphone

The microphone channel records air over pressure. In this section of the Micromate Recording Setup dialog, you enable the **Microphone ISEE Channel**, select the channel as a Trigger Source, and set a Trigger Level.

i Enable Trigger

Click on the **Enable Trigger** checkbox to use the microphone channel as a Trigger Source. For example, when selecting the microphone as a Trigger Source, Event recording begins on all enabled channels when Event activity exceeds the Trigger Level of the microphone. Refer to Trigger Level, below.

ii Trigger Level

Set a **Trigger Level** for the microphone. To set a Trigger Level, click on the **Trigger Level** text box. Enter the new level.

Note: In certain situations, the actual trigger level may be lower than the trigger level that you entered. This is because the monitor converts the analog signal it receives from the microphone into digital data, which consists of a series of discrete values. If the trigger level that you entered does not match one of these values, Blastware automatically sets the trigger level to the nearest lower value.

The available Trigger Level range is 100 – 148 dB(L).

(8) Enable Sound Level Microphone

The optional Sound Level Microphone (Part No. 720A5101) records acoustic noise. In this section of the Micromate Recording Setup dialog, you enable the **Sound Level Microphone Channel**, select the channel as a Trigger Source, set a Trigger Level, choose A- or C-weighting, choose fast or slow response time, and set statistical noise levels.

i Enable Trigger

Click on the **Enable Trigger** checkbox to use the microphone channel as a Trigger Source. For example, when selecting the microphone as a trigger source, Event recording begins on all enabled channels when Event activity exceeds the Trigger Level of the microphone. Refer to Trigger Level, below.

ii Trigger Level

Set a **Trigger Level** for the microphone. To set a Trigger Level, click on the **Trigger Level** text box. Enter the new level.

Note: In certain situations, the actual trigger level may be lower than the trigger level that you entered. This is because the monitor converts the analog signal it receives from the microphone into digital data, which consists of a series of discrete values. If the trigger level that you entered does not match one of these values, Blastware automatically sets the trigger level to the nearest lower value.

The available Trigger Level range is 33 – 140 dB.



iii **A-Weighting**

Set the frequency weighting filter. A-weighting mimics the frequency sensitivity of the ear at low levels, filtering out most of the low-frequency noise. A-weighted measurements are expressed as dBA.

iv **C-Weighting**

Set the frequency weighting filter. C-weighting mimics the frequency sensitivity of the ear at high levels, including more of the low-frequency range of noise than A-weighting. C-weighted measurements are expressed as dBC.

v **Fast**

Set the response time weighting to 125mS.

vi **Slow**

Set the response time weighting to 1 second.

vii **L(N1)**

Set a statistical noise level, expressed as a percentage. L(N1) must be between 1-98 and must be less than L(N2).

viii **L(N2)**

Set a statistical noise level, expressed as a percentage. L(N2) must be between 2-99, and must also be greater than L(N1).

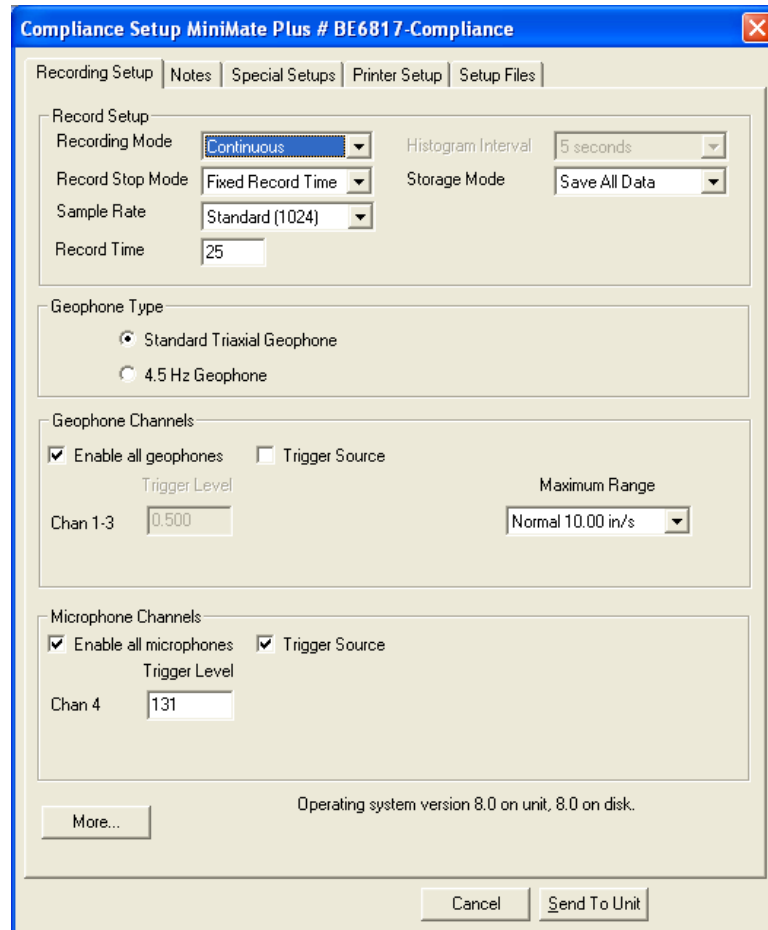
b. Series II and III Recording Setup

Note: The **Recording Setup** for Micromate is covered in the previous step.

The record mode sets how the monitor records Events. To choose a recording mode, click on the **Recording Mode** drop-down menu and select a record mode. Choose one of the following recording modes.

i **Single Shot Record Mode**

Use single shot record mode to record one Event automatically. The monitor records the Event, displays the results, and stops. No further recording occurs. Recording begins automatically when an Events vibration or overpressure channel exceeds the preset trigger level.



ii Continuous Record Mode

Use continuous record mode to record multiple Events automatically with no dead time between Events. The monitor records an Event, displays the results, and continues to monitor, ready to record following Events. The monitor records all Events whose activity exceeds the preset trigger level.

iii Manual Record Mode

Use manual record mode if automatic triggering is unreliable, due to excessive wind or nearby vehicle activity, or to record the background noise level in the vicinity of a site. Recording can be initiated from the Unit Monitor Status dialog.

iv Histogram (Strip chart) Record Mode (Blastmate II and Series III only)

Use the histogram record mode for long-term recording periods such as monitoring of pile driving operations. Histogram record mode operates with both four and eight channel monitors. Four channel histogram Events can be printed on the Blastmate III printer, eight channel Events cannot. Print eight channel Events using the Blastware software program.

In histogram mode, the monitor stores summary information in intervals. The monitor continues to sample data continuously at the chosen sample rate but only stores the relevant peaks for the interval. This reduces the data recorded and greatly increases the monitors storage capacity. For each interval, the monitor calculates the maximum peaks, the frequency of the largest peak, and the peak vector sum. For each channel, the maximum peak and its frequency are calculated. Also the largest peak vector sum is calculated over the entire Event. Events may be printed in histogram or tabular mode using the Blastmate III. Histogram mode displays the peak of each interval in a bar chart, while tabular format represents the peaks as numbers.



v Histogram Combo Mode (Series III only)

This mode creates a waveform during Histogram recording if the signal exceeds the waveform trigger level. The waveform Event is saved as a separate file while the Histogram Event file remains continuous. A maximum of 13, 1-second waveform Events can be recorded. The auxiliary trigger and printing are automatically disabled during histogram combo mode.

The maximum sample rates in this mode are as follows:

- a. 4 channels or less: 2048 samples per second
- b. more than 4 channels: 1024 samples per second

(2) Record Stop Mode

The Recording Stop Mode sets how the monitor stops recording after being triggered. Choose a record stop mode if you are using the single shot or continuous record modes. You can choose between a **Fixed Record Time** setting or an **Auto Record** setting. **Fixed Record Time** sets the record time to a specified length. Once the record time has elapsed, the monitor stops recording. In **Auto Record**, unlike the **Fixed Record Time**, the monitor continues to record Event activity as long as that activity remains above the trigger level (sufficient memory and battery power must be available). Recording stops a specified period of time after the Event activity falls below the trigger level. The specified period of time, called the **Auto Window**, can be adjusted. Use the **Auto Record** mode if you are unsure of the actual Event duration.

To choose a Recording Stop Mode, position the mouse pointer on the **Recording Stop Mode** drop-down menu and click the mouse button. Choose **Fixed Record Time** or **Auto Record**.

(3) Sample Rate

The monitor has three sample rates; standard (1024 samples per second), fast (2048 samples per second), and faster (4096 samples per second on channels 1 to 4 only). The choice of a sample rate depends on the type of monitoring you are conducting. Increasing the sample rate increases the accuracy of the waveform recording. For this reason, set the sample rate according to the location of the standard transducer or the Minimate Plus. For close-in or near field monitoring, set the sample rate to 4096 samples per second. For far-field monitoring, set the sample rate to 1024 samples per second. Increasing the sample rate also increases the amount of memory required to store Events and reduces the number of Events that can be stored on the monitor. It also reduces the battery life.

To choose a recording rate, click on the **Sample Rate** drop-down menu. Click the mouse pointer on the required sample rate.

(4) Record Time/Auto Window

This setting changes between record time and auto window depending on the record stop mode chosen above. If you chose **Fixed Record Time**, enter a time in seconds in the Record Time box. If you chose **Auto**, enter a value for the Auto Window ranging from one to nine seconds.

(5) Histogram Interval

Set the Histogram Interval if histogram or histogram combo record mode was chosen. The histogram interval is the period of time the monitor records Event information before applying the data analysis techniques. For each interval, the monitor calculates the maximum negative peaks, the frequency of the largest peak, and up to two peak vector sums (one for 4 channel monitors, two for 8 channel monitors). For each channel the maximum peak and its frequency are calculated. The peak vector sum is calculated over the entire Event. See the Blastmate III or the Minimate Plus manual for approximate histogram recording times.

(6) Storage Mode

The storage mode setting allows you to set the amount of data stored with each Event. In the Full Data setting, the monitor stores all Event data. When **Save Summary Only** is selected, only the peaks are stored in the Event – the individual sample rates are not stored.



To select a storage mode, click on the **Storage Mode** drop-down menu. Click the mouse pointer on either **Save All Data** or **Save Summary Only**.

(7) Geophone Type

Select the type of geophone that you are using.

(8) Geophone Channels

The Geophone channels record ground vibrations. In this section of the dialog box, you enable the Geophone channels, select the channels as a trigger source, set a trigger level and choose a range.

i Enable all geophones

Click on this checkbox to turn the Geophone channels on when monitoring. Click on the box again to clear the checkmark to turn the channels off and not record ground vibrations. Note that the other checkboxes in the section fade indicating they cannot be selected. On eight channel monitors, enabling all Geophones turns on all the Geophone channels, one to three and five to seven.

ii Trigger Source

Click on this checkbox to use the Geophone channels as a trigger source. The Trigger Level box brightens indicating it can be set. For eight channel monitors, choosing a trigger source applies to both sensor groups. For example, choosing Geo as a trigger source designates both Geophone transducers as trigger sources. Triggering occurs and Event recording begins on all channels when Event activity exceeds the trigger level of either Geophone transducer.

iii Trigger Level

The trigger level sets a threshold that must be exceeded by an Events activity before the monitor begins recording. Use your judgment when setting a trigger level. You must set the level high enough so the unit does not trigger on unwanted Events such as nearby vehicle traffic. At the same time, you have to set the trigger level low enough so that an Events activity exceeds the trigger level and starts the unit recording.

On eight channel monitors, set the trigger levels for the first standard transducer in the first text box then set the trigger level for the second standard transducer in the second text box.

To set a trigger level, double click on the **Trigger Level** box. Enter the new level.

Note: In certain situations, the actual trigger level may be lower than the trigger level that you entered. This is because the monitor converts the analog signal it receives from the Geophone into digital data, which consists of a series of discrete values. If the trigger level that you entered does not match one of these values, Blastware automatically sets the trigger level to the nearest lower value.

iv Maximum Range

The Maximum Range specifies the measurement limits of the standard transducers Geophones. Two ranges are available; Normal 10.0 in/s (254 mm/s) and Sensitive 1.25 in/s (31.7 mm/s). Choosing a geo range depends on the proximity of the transducer to the Event and the expected particle velocities. On eight channel monitors, set the maximum range for the first standard transducer in the first text box. Set the maximum range for the second standard transducer in the second text box.

To choose a maximum range, click on the **Maximum Range** drop-down menu. Choose a range.

(9) Microphone Channel

The microphone channel records air over pressure. In this section of the Recording Setup dialog box, you enable the microphone channel, select the channel as a trigger source, and set a trigger level.

i Enable all microphones

Click on this checkbox to turn the microphone channel on when monitoring. Click on the box again to clear the checkmark to turn the channel off and not record sound pressure during



monitoring. Note the other checkboxes in the section fade indicating they cannot be selected. On eight channel monitors, enabling all microphones turns on the microphone channels four and eight.

ii **Trigger Source**

Click on this checkbox to use the microphone channel as a trigger source. The Trigger Level checkbox brightens indicating it can be set.

Note: You can set both the Geophone and Microphone Channels as trigger sources. An Events activity has to exceed only one of the trigger levels to start recording Event activity on all channels.

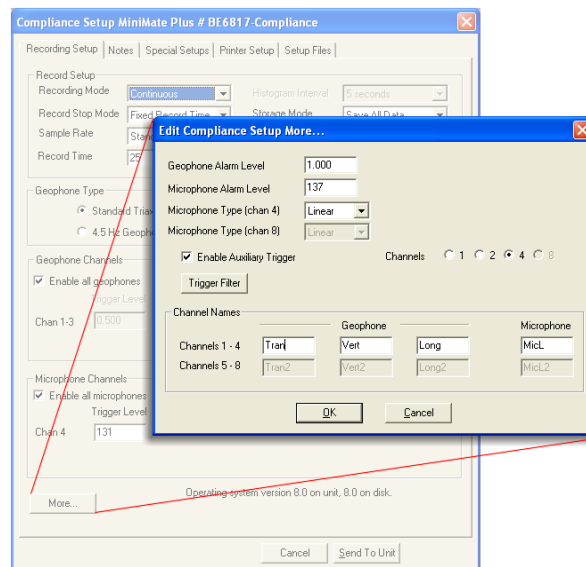
iii **Trigger Level**

Set a trigger level for the microphone. On eight channel monitors, set the trigger level for the first microphone in the first text box then set the trigger level for the second microphone in the second text box.

To set a trigger level, click on the **Trigger Level** text box. Enter the new level.

Note: In certain situations, the actual trigger level may be lower than the trigger level that you entered. This is because the monitor converts the analog signal it receives from the microphone into digital data, which consists of a series of discrete values. If the trigger level that you entered does not match one of these values, Blastware automatically sets the trigger level to the nearest lower value.

c. **Edit Compliance Setup ‘More’ for Series II, III and IV**



Note: Edit Compliance Setup ‘More’ for Micromate is covered in the next step.

i **Geophone Alarm Level**

The alarm level controls the triggering of an optional Remote Alarm Controller, Part No. 721A0902 for Series III and Series IV).

The remote alarm can sound two alarms: warning and alarm. The warning alarm sounds when Event activity exceeds the Trigger Level for the Geophone. The alarm level can be set to a different level that is higher than the trigger level of the Geophone. This allows for the triggering of a second alarm at the higher level.

For example, in pile driving operations the remote alarm triggers a warning when activity exceeds the trigger level for the Geophone, notifying the operator that the pile driving activity has



exceeded that set level. The second alarm triggers when activity exceeds the alarm level, set to a higher level, notifying the operator to re-evaluate the piling operation.

To set an alarm level, double click on the **Alarm Level** box. Enter the new level that is within the stated range (Range: 0.508 – 254 mm/s).

ii **Microphone Alarm Level**

For a description of the optional remote alarm, see the Geophone channel in the previous section.

To set an alarm level, click on the **Microphone Alarm Level** box. Enter the new level that is within the stated range (Range: 100.0 – 148 dB(L)).

iii **Microphone Type (Chan 4 or Chan 8)**

Select the microphone type being used; either Linear “L” or “A” Weight. Click on the **Type** drop-down menu and select the Linear or “A” Weight. On eight channel monitors, set the microphone type for the second microphone in the second text box.

iv **Enable Auxiliary Trigger**

This command turns on the Auxiliary Trigger feature and allows the monitor to be triggered by an external trigger. InstanTel offers a variety of external triggers including the DS–20 Wire Break Trigger package (Part Number 677A9601).

To enable the **Auxiliary Trigger**, click on the checkbox to display checkmark.

v **Channels**

Select the number of **Channels** you would like to record data on by clicking on their associated radio button.

vi **Channel Names**

The channel names can be changed. These names appear throughout the software including in printed Event reports. The default names describe the compliance sensors connected to the monitor. The new names can be alphanumeric up to five characters in length. To change the **Channel Names**, double click on the existing name and enter the new name.

(2) **Command Buttons**

To choose one of the following command buttons, click the mouse pointer on the button.

i **Cancel**

Exit the dialog box and return to the previous Recording Setup dialog without accepting the changes.

ii **OK**

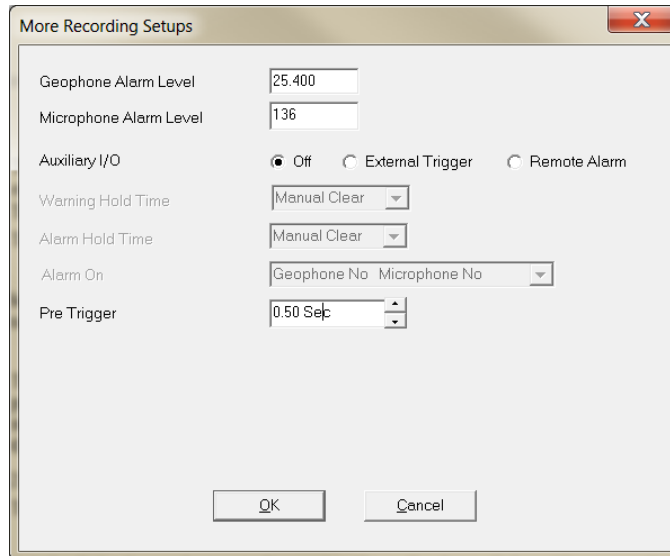
Approve the changes in this dialog box.



d. Edit Compliance Setup ‘More’ for Micromate

Note: Edit Compliance Setup ‘More’ for Series II and III is covered in previous step.

(1) The **More** dialog within the Micromate Recording Setup dialog allows you to configure the optional Auxiliary I/O for an optional external trigger or the optional Remote Alarm (Part No. 721A0901). Refer to the associated product specification sheet (Part No. 714U0901) that was shipped with the Remote Alarm for more information. The Remote Alarm must be attached to the optional Auxiliary Port (Part No. 721A0101) on the Micromate.



i Geophone Alarm Level

The alarm level controls the triggering of an optional Remote Alarm Controller, Part No. 721A0901 for Micromate.

The remote alarm can sound two alarms: Warning and Alarm. The Warning Alarm sounds when Event activity exceeds the **Geophone Alarm Level**. The alarm level can be set to a different level that is higher than the trigger level of the Geophone. This allows for the triggering of a second alarm at the higher level.

For example, in pile driving operations the remote alarm triggers a warning when activity exceeds the trigger level for the Geophone, notifying the operator that the pile driving activity has exceeded that set level. The second alarm triggers when activity exceeds the alarm level, set to a higher level, notifying the operator to re-evaluate the piling operation.

To set an alarm level, double click on the **Geophone Alarm Level** box. Enter the new level that is within the stated range (Range: 12.570 – 254.000 mm/s).

ii Microphone Alarm Level

For a description of the optional remote alarm, see the Geophone channel in the previous section.

To set an alarm level, click on the **Microphone Alarm Level** box. Enter the new level that is within the stated range (Range: 130 – 148 dB(L)).

iii Auxiliary I/O

This command turns on the optional **Auxiliary I/O** feature, factory installed at the time of purchase, and allows the monitor to be triggered by an **External Trigger** or a **Remote Alarm**. If you do not want to use this feature, set **Auxiliary I/O** to **Off**. To enable the **Auxiliary I/O**, click on the radio button next to the accessory that you will be using, **External Trigger**, such as a wire make/break, or **Remote Alarm**.



When the **Remote Alarm** option is selected, the **Warning Hold Time**, **Alarm Hold Time**, and **Alarm On** drop down boxes become available. The **Alarm On** option allows you to select which sensor setup and activity that you would like to initiate a **Remote Alarm**.

iv **Warning Hold Time**

Set the duration of time for the warning. The default setting is **Manual Clear**, which requires pressing the **Enter** (Checkmark) key at the unit. Additional settings include **2, 5, 15, 30, 60, 180** and **300** seconds.

v **Alarm Hold Time**

Set the duration of the alarm. The default setting is **Manual Clear**, which requires pressing the **Enter** (Checkmark) key at the unit. Additional settings include **2, 5, 15, 30, 60, 180** and **300** seconds.

i **Pre Trigger**

The **Pre Trigger** feature captures up to one second of buffered event data that was recorded prior to the set **Trigger Level**, and includes it in the final recorded **Event Data**. Set a **Pre Trigger** range from 0.25 Sec to 1.00 Sec.

(2) **Command Buttons**

To choose one of the following command buttons, click the mouse pointer on the button.

i **Cancel**

Exit the dialog box and return to the previous Recording Setup dialog without accepting the changes.

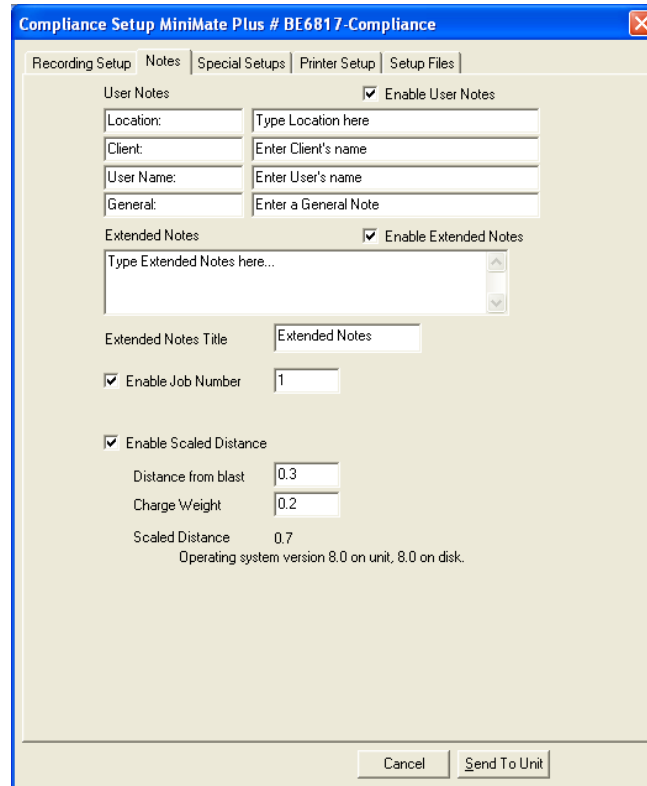
ii **OK**

Approve the changes in this dialog box.

e. **Notes**

To display the Notes dialog box, open the **Unit, Setup, Compliance Setup** menu and select the **Notes** tab. The Edit Notes dialog box appears.

The Notes dialog box lets you enter notes about an Event. These notes are then saved with the Event when it is recorded. The notes become part of the permanent record and cannot be changed after an Event has been recorded. The notes are very flexible, offering you the ability to change their titles and content.



To enter notes, click on a space and delete the existing note by pressing and holding the **Backspace** key. Enter the new notes for each User Notes field box.

(1) **Enable User Notes**

When you enable user notes, the information contained in the User Notes dialog box is recorded with every Event. If you do not require this information, disable user notes by clicking on the **Enable User Notes** checkbox to clear the checkmark.

(2) **User Notes**

Enter the notes you wish to include with the recorded Events. You can include user note headings like the ones in the figure above. You can use these headings or delete them and enter your own. You can also delete them entirely and use no headings. Headings can range up to 20 characters in length. In the right hand column, enter your user notes. User notes can range up to a maximum of 64 characters in length.

(3) **Extended Notes**

Use this area to enter additional notes as required up to a maximum of 640 characters.

(4) **Enable Extended Notes**

When you enable extended notes, the information contained in the Extended Notes dialog box is recorded with every Event. If you do not require this information, disable extended notes by clicking on the **Enable Extended Notes** checkbox to clear the checkmark.

(5) **Extended Notes Title**

Enter a name for the extended notes section up to 20 characters in length.

(6) **Enable Job Number**

You may include a job number to identify a series of recorded Events. This helps you keep track of Events in the monitor and on your computer. To enable the Job Number, click the mouse pointer on the **Enable Job Number** checkbox to enter a checkmark.



(7) **Job Number**

Enter a job number. Job numbers range from 1 to 9999. Double click on the **Job Number** box and enter a new job number.

(8) **Enable Scaled Distance**

Check this box to enable the recording of scaled distance information with each Event. Enter the Distance from blast and the Charge Weight. Blastware automatically calculates and displays the Scaled Distance value. The value appears both within this dialog box and on Event Summary Reports.

(9) **Distance from blast**

Enter the distance from the monitor to the blast in feet or meters.

(10) **Charge Weight**

Enter the charge weight of the blast in pounds or kilograms.

(11) **Scaled Distance**

The Scaled Distance result appears within this dialog box and on Event Summary Reports.

(12) **Command Buttons**

To choose one of the following command buttons, click the mouse pointer on the button.

i **Cancel**

Exit the dialog box and return to the Blastware Main Menu.

ii **Send To Unit**

Transfer your settings to the monitor.

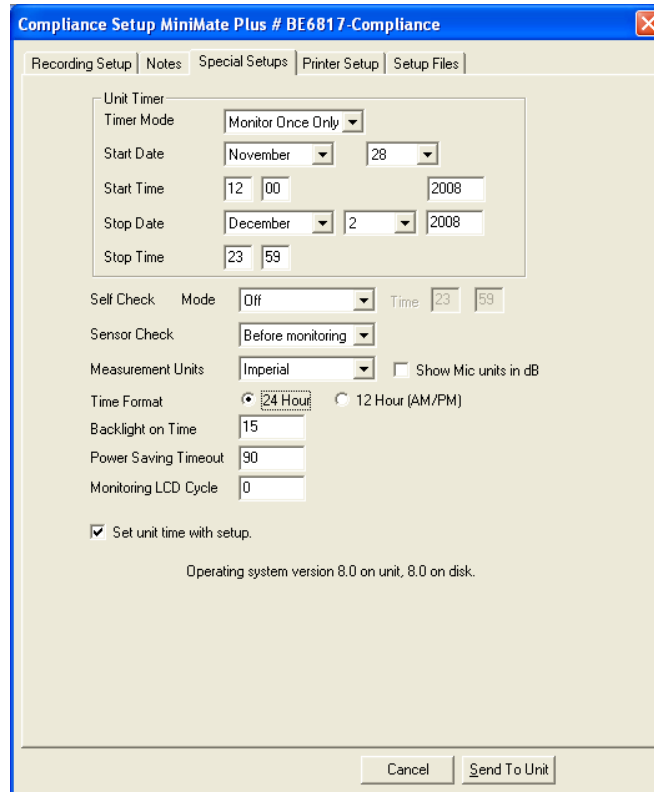
f. Special Setups (Micromate)

Refer to **Special Setups** within the **Compliance Setup** for **Series IV**, Section 4.2.3.

g. Special Setups (Series II and III)

To display the Special Setups dialog box, open the **Unit, Setup, Compliance Setup** menu and select the **Special Setups** tab.

The Special Setup dialog box includes setting the timer, self check mode and time, when Sensor Check operates, measurement units, microphone units, time format, Backlight on Time, Power Saving Timeout, and the Monitoring LCD Cycle. After you have entered your settings in each dialog box, choose **Send** to transfer your settings to the monitor.



(1) Unit Timer

The timer function sets the monitor to automatically turn on and start monitoring operations at a preset time in the future. The timer can be set for a one time monitoring session or it can be set to record at the same time every day. Using the timer extends the monitors battery life by turning on and monitoring only the time periods when Events occur and not the time periods between Events.

Note: When using a monitor in the Timer Mode, the monitor stops recording even if Event activity is present and exceeds the trigger levels. The monitor waits until after the present Event is recorded. If recording in the Histogram Record Mode, the monitor stops recording immediately and discards the last histogram interval if incomplete.

(2) Timer Mode

The timer can be set for a one time operation or repeated operations at the same time each day.

i Off

Choose this setting if you do not require the unit timer.

ii Monitor Once Only

Choose this setting if you want the monitor to turn on monitor for a set period of time, then turn off. Open the **Timer Mode** drop-down menu and choose **Monitor Once**.

• Start Date

Enter the calendar date when you want the monitor to turn on.

• Start Time

Enter the time of day when you want the monitor to turn on and start monitoring.

• Stop Date

Enter the calendar date to turn the monitor off.

• Stop Time

Enter the time of day to turn the monitor off and stop monitoring.



After you have configured the timer, click on **Send** to send the settings to the monitor. Next, you must enter the monitor into the Monitor Mode. To do this, choose **Start Monitor** from the **Monitor** command located under the **Unit Menu**.

iii **Monitor Every Day**

Choose this setting if you want the monitor to turn on and record at the same time every day beginning immediately. Open the **Timer Mode** drop-down menu and choose **Monitor Every Day**. Note the Start Date and Stop Date items dim indicating they do not require setting in this timer mode.

- **Start Time**

Enter the time of day when you want the monitor to turn on and start monitoring.

- **Stop Time**

Enter the time of day to turn the monitor off and stop monitoring.

After you have configured the timer, click on **Send** to send the settings to the monitor. Next, you must enter the monitor into the Monitor Mode. To do this, choose **Start Monitor** from the **Monitor** command located under the **Unit Menu**.

(3) **Self Check Mode**

Use the Self Check Mode for remote monitoring where you require a record indicating the monitor was operating properly over a period of time. The self check mode only occurs when the monitor is in the monitor mode. The monitor temporarily exits the monitor mode, at the same time each day specified by you, performs the check, and returns to monitor mode. The results appear in a monitor log entry.

To set the self check mode, move the mouse pointer to the **Self Check Mode** drop-down menu and click. Choose **On** to turn the self check mode on. Choose **Off** if you do not require self check to operate.

(4) **Time**

Enter a time for the Self Check Mode to run. Click on the **Time** boxes and enter a time.

(5) **Sensor Check**

This setting chooses when to automatically run Sensor Check to test your monitor and its sensors. You can choose to run Sensor Check after recording each Event or only once before a monitoring session starts. You can also choose to disable Sensor Check. If you choose **After Each Event**, Sensor Check runs after recording each Event. Results are saved with each Event and appear on the monitor display. If you choose **Before Monitoring**, Sensor Check runs once before monitoring starts, immediately after you enter the monitor mode. The results of this single Sensor Check appear with each Event recorded during the monitoring session. This setting provides a zero recycle time and ensures you cannot miss an Event when using the continuous record mode (the Automatically Print Event After Recording function in the Printer Setup dialog box must also be turned off).

To select a Sensor Check position, click on the **Sensor Check** drop-down menu. Click on **After each Event** or **Before monitoring**. Select **Disabled** if you do not wish to use Sensor Check.

(6) **Measurement Units**

The Blastmate III and Minimate Plus use either **Metric** or **Imperial** measurement units.

To choose the measurement units, position the mouse pointer on the **Measurement Units** drop-down menu and click. Click on either **Metric** or **Imperial**.

(7) **Time Format**

This sets the time format for the monitors clock. You can choose between the 24 hour and the 12 hour AM/PM time formats.

To choose a time format, click on either button.



(8) **Backlight on Time**

This command sets the length of time the backlight remains on by setting an adjustable timer from 0 to 255 seconds. To disable the backlight and not have it turn on, set the timer delay to 0. This conserves battery power.

To set the Backlight on Time, click on the **Backlight on Time** box and enter a new time.

(9) **Power Saving Timeout**

The Power Saving Timeout is a timer that automatically turns the monitor off when it has remained in the ready to monitor mode while detecting no key presses for a specified period of time. This conserves battery power. The monitor will also turn off while connected to a computer but automatically turns on again when the computer communicates with the monitor.

To set the Power Saving Timeout, click on the **Power Saving Timeout** box and enter a new time.

(10) **Monitoring LCD Cycle**

The Monitoring LCD Cycle is a timer that automatically starts a power saving mode. While in this mode, the monitor minimizes power consumption while continuing its monitoring operations. The monitor turns the display off for the time period set in this command, turns on the display momentarily, then cycles the display off again. To turn this feature off, set the time to zero. To reactivate the monitor and see the display, press the **On/Off** key.

To set the Monitoring LCD Cycle, click on the **Monitoring LCD Cycle** box and enter a new time.

(11) **Set Unit Time with Setup**

To synchronize the Unit clock with the personal computer clock, place a checkmark in the box prior to selecting **Send to Unit**. Disable **Set Unit Time with Setup** by clicking on the checkbox to clear the checkmark.

(12) **Command Buttons**

To choose one of the following command buttons, click the mouse pointer on the button.

i **Cancel**

Exit the dialog box and return to the Blastware Main Menu.

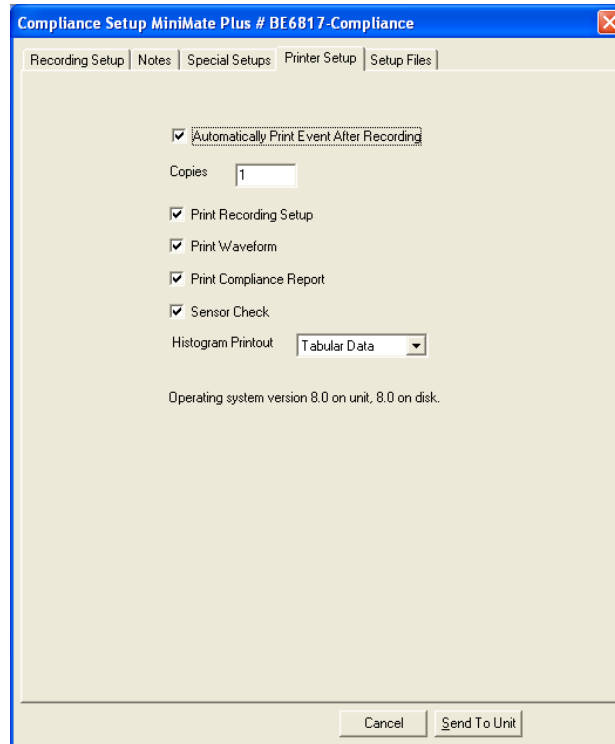
ii **Send To Unit**

Transfer your settings to the monitor.

h. Printer Setup (Blastmate III Only)

To display the Printer Setup dialog box, open the **Unit, Setup, Compliance Setup** menu and select the **Printer Setup** tab.

The Printer Setup dialog box configures the Event Summary Report printed by the Blastmate III printer. Settings include when the report is printed, how many copies will be printed, and the reports contents. After you have entered your settings in each dialog box, choose **Send To Unit** to transfer your settings to the monitor.



(1) **Automatically Print Event After Recording**

Choose this to print the Event Summary Report immediately after recording an Event. To turn this on, position the mouse pointer on the checkbox and click the mouse button to display a checkmark.

(2) **Copies**

Multiple copies of the Event Summary Report can be printed automatically. The number of copies ranges from one to ten. Click on the **Copies** text box and enter a new number.

(3) **Print Recording Setup**

This prints the recording setup used by the monitor to record the Event. The setup information specifies the trigger source, trigger level, record time, sampling rate, and notes. Position the mouse pointer on the **Print Recording Setup** checkbox and click to display a checkmark.

(4) **Print Waveform**

This prints a graphical waveform representing the Events activity recorded by each channel. To include this, click on the **Print Waveform** checkbox.

(5) **Print Compliance Report**

Use this command to print the Compliance Report, also known as a National Frequency Standard, on each Event Summary Report. To include the compliance report, click on the **Print Compliance Report** checkbox to display a checkmark.

(6) **Sensor Check**

This prints a graphical representation of the Sensor Check results for each Geophone and the microphone channel. The Pass/Fail status of the Sensor Check always appears on the Event Report, but the numerical results are only included when the graph is present. You can choose to include the Sensor Check graph in the Event Summary Report or not. Click on the checkbox to display a checkmark and include the Sensor Check graph.



(7) **Histogram Printout**

The setting configures how the Blastmate III printer prints histogram Events. Choose **Graphics** to print a histogram for each recorded interval. Choose **Tabular Data** to print numerical results of the data analysis for each interval. If you do not require printing of histogram record mode results, choose **None**.

(8) **Command Buttons**

To choose one of the command buttons, click the mouse pointer on the button.

i **Cancel**

Exit the Printer Setup dialog box and return to the Blastware Main Menu. You are prompted to send your changes to the unit.

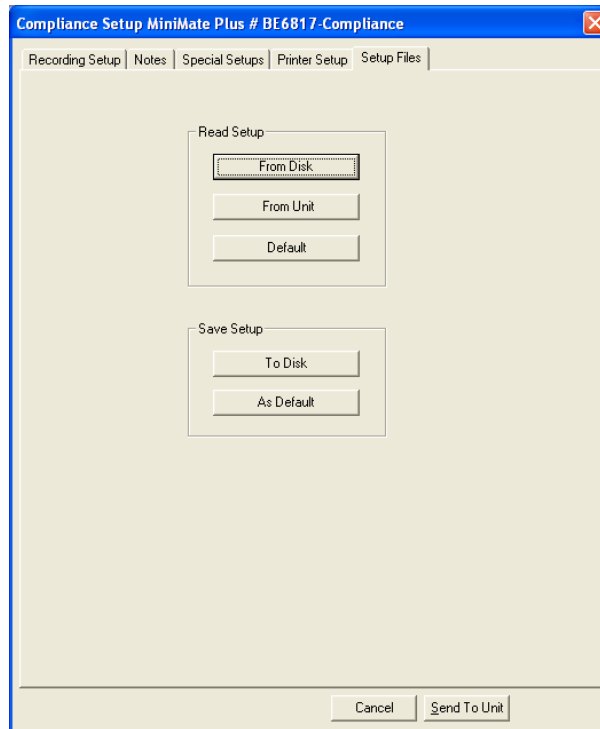
ii **Send To Unit**

Transfer your settings to the monitor.

i. **Setup Files**

To display the Library Files dialog box, open the **Unit, Setup, Compliance Setup** menu and select the **Setup Files** tab.

The **Setup Files** dialog box allows you to load and save settings from your PC or the unit, and to specify any changes you have made to be the default settings. These files have a .set file extension.



(1) **Read Setup**

i **From Disk**

Load a saved setup file from your PC. Locate previously saved setup files and load them to affect the unit currently connected to your PC by clicking on **Send to Unit**.

ii **From Unit**

Load the setup library files that are currently being used on the unit connected to your PC.



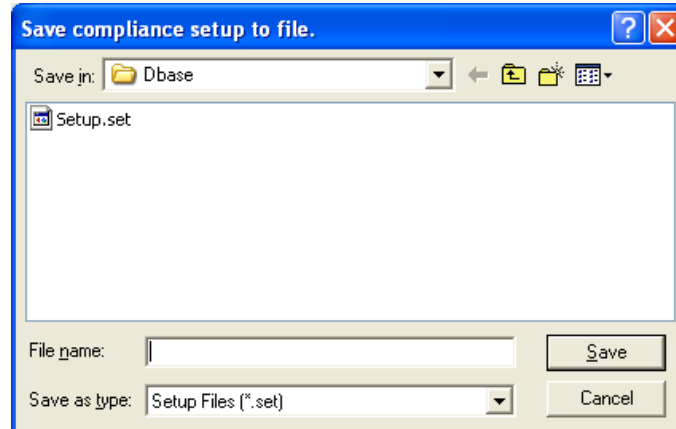
iii Default

Select **Default** to load the previously saved file.

(2) Save Setup

i To Disk

Save your current setup settings to a file. Click on **To Disk**, and save the file into the default “Dbase” directory.



ii As Default

Use your current settings as the default every time you connect a unit and click on **Default**.

(3) Button Commands

To choose one of the command buttons, click the mouse pointer on the button.

i Cancel

Exit the Printer Setup dialog box and return to the Blastware Main Menu.

ii Send To Unit

Transfer your settings to the monitor.