BG TECHNOLOGIES

GasAlertMicroClip Soft Tools Instruction Sheet

Introduction

The GasAlertMicroClip Soft Tools application is required to configure the GasAlertMicroClip detector ("the detector").

Software/Hardware Installation

⚠ Important

Complete the entire installation process for both the software (Soft Tools) and the hardware (IR Link) before removing the Soft Tools CD or operating the Soft Tools program.

Do not insert the USB cable into the computer until instructed in the following procedures.

1. Insert the Soft Tools CD into the computer. If Java Runtime is not installed on your computer the following pop-up displays.

Figure 1. Java Runtime Not Found Pop-up

If Java is currently installed, the Soft Tools Setup pop-up (Figure 2) displays. Allow 20-30 seconds for the pop-up to display. Proceed to step #3.

2. Click [OK]. Soft Tools will automatically install Java Runtime. When Java has installed, the Soft Tools Setup pop-up displays.

Figure 2. Setup Pop-up

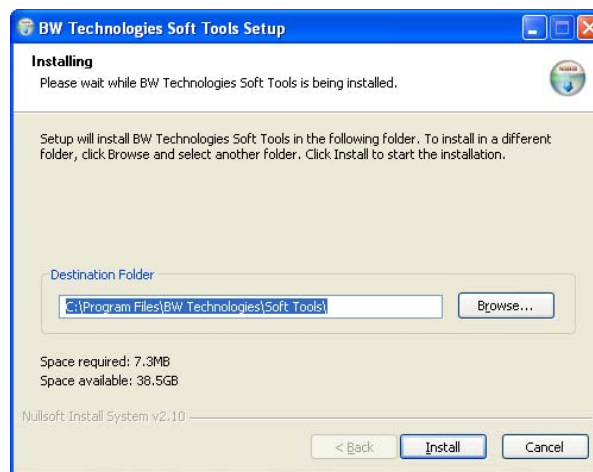3. The setup process requires approximately 30 seconds. When the setup is loaded, the following window displays.

Figure 3. Software Installation Wizard Window

If Setup Pop-up Does Not Display: If the pop-up does not display, complete the following:

- From the desktop, double-click **My Computer**.

- Double-click the **CD Drive**. The setup will automatically begin. Proceed to step #3.

4. From the Software Install window, click [Install] to proceed.

The install program automatically creates a folder on the C: drive for the software.

Or

Click [Browse...] to select a different location to save the software and then click [Install].

The installation requires approximately 20 seconds. When the software installation is complete, the following window displays.

Figure 4. Installation Complete Window

5. Click [Finish] to complete the installation.

The software installation is complete.

⚠ Important

Do not remove the Soft Tools CD from the computer.

6. Connect the IR Link to the USB cable. If required, refer to Figure 10 and Connecting the IR Link to the Detector.

7. Connect the USB cable to the USB port on the computer. The following window displays.

Figure 5. Found New Hardware Wizard Window

8. Click ◯ **Yes, this time only** and then click Next >. The following window displays.

Figure 6. USB Device Installation Window

9. Click ◯ **Install the software automatically (Recommended)** and then click Next > at the bottom of the window. The following window displays.

Figure 7. USB Device Search Window

The wizard searches for the USB device. When the computer locates the USB device, the following window displays.

Figure 8. Hardware Installation Message Window

Note

The Soft Tools software is thoroughly tested by BW Technologies and will not harm your computer system.

10. Click Continue Anyway. The following window displays.
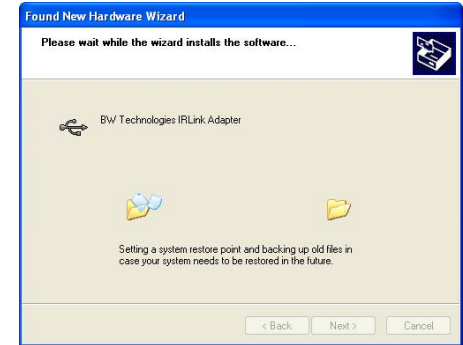
Figure 9. USB Install Wizard Window

The installation requires approximately 5-10 seconds. The following window displays.

Figure 10. Completing the Found New Hardware Window

11. When the installation is complete, click Finish. The installation of the software and hardware is complete. Proceed to Getting Started.

Connecting the IR Link to the Detector

To transfer data between Soft Tools and the detector, refer to Table 1, Figure 11, and complete the following procedures.

Table 1. Connecting the Detector to the IR Link

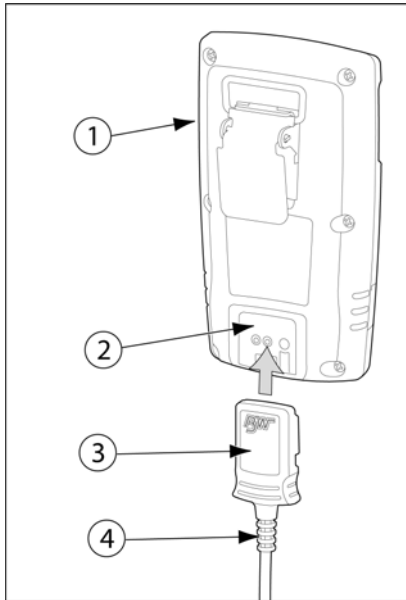| Item	Description
1	Detector
2	IR interface
3	IR Link
4	USB cable

Figure 11. Connecting the Detector and IR Link

1. Activate the detector and wait for start-up to complete.

2. Connect the USB cable to the USB port on the computer.

3. Connect the USB cable to the IR Link (if required).

4. Insert the IR Link into the IR interface on the back of the detector.

To operate the GasAlertMicroClip Soft Tools program, refer to the following section, Getting Started.

Getting Started

The IR Link is compatible only with Windows XP and higher. Soft Tools is used to

- define all of the settings for the sensors,

- set the user options,

- save detector settings to a file that can be transferred to additional detectors,

- download datalogs and event logs,

- retrieve settings from a detector that can be used to configure additional detectors,

- initiate calibrations, and

- upgrade firmware.

Using Soft Tools

Soft Tools consists of two tabs that are used to perform functions and define settings for the sensors and the detector.

Sensors (Figure 12)

Device Operations (Figure 13)

Sensors

The **Sensors** tab is used to define settings for the sensors and the detector. The **Sensors** tab consists of the

- **Detector Identification** section,

- sensor fields (used to define settings for the sensors),

- **User Options** section (used to define settings for the detector), and

- **Language** section (used to set the desired language the detector displays).
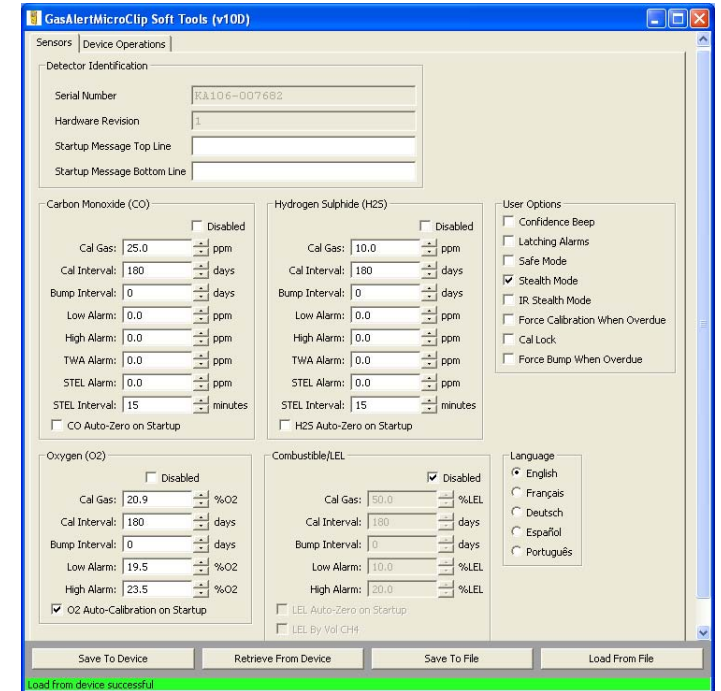

Figure 12. GasAlertMicroClip Soft Tools (Sensors Tab)

Detector Identification

This section provides information about the

- **Serial Number** (**KA106-123456**), and

- **Hardware Revision** (**1**) current firmware the detector is using.

This section also provides two fields that are used to enter text (e.g., distributor name with 1-800 number or employee name) that will display on the GasAlertMicroClip detector LCD during start-up.

- **Startup Message Top Line** (maximum 25 characters)

- **Startup Message Bottom Line** (maximum 25 characters)

Sensor Fields

All settings for the sensors are set from the sensor fields. Individual fields are provided for each sensor.

- **Carbon Monoxide (CO)**

- **Oxygen (O$_2$)**

- **Hydrogen Sulfide (H$_2$S)**

- **Combustible/LEL**

☐ **Disabled:** Click inside the checkbox to enable/disable the sensor.

Enabled   ☑
Disabled   ☐

⚠ **Warning**

Disabling an installed sensor configures the detector to a 1, 2, or 3-gas unit. Protection is no longer provided from the gas targeted by the disabled sensor(s). Disabling a sensor should be performed with extreme caution.

If a sensor fails, disabling the sensor also deactivates the detector alarm. The sensor should be replaced and enabled as soon as possible. The detector will function normally with the remaining enabled sensors.

Cal Gas: The calibration gas option is used to increase/decrease the gas concentration level for calibration (it must match the value of the span gas that is used to calibrate the sensor). Press ▲ or ▼ to increase or decrease the concentration level for the selected sensor.

Cal Interval: Press ▲ or ▼ to define how often calibration must be performed (**0** to **365** days). Select zero (**0**) to disable the **Cal Interval** option.

Note

BW recommends that the detector be calibrated once every 180 days (6 months).

Bump Interval: Press ▲ or ▼ to define how often a bump check must be performed (**0** to **365** days). Select zero (**0**) to disable the **Bump Interval** option.

Note

BW recommends that the detector be bump checked once every 24 hours prior to the work shift.

Low Alarm: Press ▲ or ▼ to define the low alarm setpoint (**0** = disabled).

High Alarm: Press ▲ or ▼ to define the high alarm setpoint (**0** = disabled).

TWA Alarm: Press ▲ or ▼ to define the time-weighted average (TWA) alarm setpoint - for toxic sensors only (**0** = disabled).

STEL Alarm: Press ▲ or ▼ to define the ppm level for the short-term exposure limit (STEL) alarm setpoint - for toxic sensors only (**0** = disabled).

STEL Interval: The short-term exposure limit can be set from **5** to **15** minutes. Press ▲ or ▼ to select the STEL interval (for toxic sensors only).

☐ **CO/H2S/LEL Auto-Zero on Startup:** Enabling this option ensures that the auto zero sequence automatically initiates during start-up when the detector is activated.

☐ **O2 Auto-Calibration on Startup:** Enabling this option ensures that the O$_2$ sensor is calibrated during start-up when the detector is activated.

☐ **LEL By Vol CH4:** If this function is enabled, LEL is measured as % by volume methane.

User Options

The **User Options** section is used to enable or disable options for the detector. Unless specified when ordered, the detector is shipped with all user options disabled.

Click inside the checkbox to toggle between enable/disable.

Enabled   ☑
Disabled   ☐

☐ **Confidence Beep:** When enabled, this option provides continuous confirmation that the detector is operating correctly. When the confidence beep is enabled, the audible alarm beeps once every 10 seconds.

☐ **Latching Alarms:** Enabling this option causes the low and high gas alarms (audible, visual, and vibrator) to persist until it is acknowledged by the user.

☐ **Safe Mode:** When enabled, the safe mode option confirms that normal ambient conditions prevail and there are no gas hazards. When all gas levels are below the alarm setpoints, **Safe** displays continually on the detector LCD.

☐ **Stealth Mode:** If enabled, stealth mode disables the backlight, the visual alarms, and the audible alarms. Only the vibrator activates during an alarm condition. When enabled, ✳ displays continually on the detector LCD.

☐ **IR Stealth Mode:** If enabled, only the infra-red (IR) LEDs and the vibrator activate during an alarm condition. When enabled, ✳ displays continually on the detector LCD.

☐ **Force Calibration When Overdue:** If enabled, this option forces calibration and prevents the detector from operating if a sensor is overdue upon start-up. To set a time period (**0** to **365** days), locate **Cal Interval** in the **Sensors** section.

☐ **Cal Lock:** If this option is enabled, calibration can only be completed (auto zero is still permitted) by

- pressing ◯ **Calibration** on the MicroDock II Base Station, or

- pressing **Calibrate** on the **Device Operations** tab in Soft Tools.

BW recommends that the sensors be calibrated every 180 days (6 months).

☐ **Force Bump When Overdue:** If enabled, this option forces a bump check and prevents the detector from operating if it is overdue upon start-up. Enabling this option ensures that a bump check is performed regularly. To set a time period (**0** to **365** days), locate **Bump Interval** in the **Sensors** section.

Note

BW recommends that a bump check be performed every 24 hours prior to the work shift.

Languages

The **Language** option is used to display all detector LCD screens in a selected language. The available languages are as follows:

- ● **English**
- ○ **Français** (French)
- ○ **Deutsch** (German)
- ○ **Español** (Spanish)
- ○ **Prtuguês** (Portuguese)

The factory default language is **English**. Click the corresponding language button to enable the desired language.

Device Operations

The **Device Operations** tab is used to perform the following functions:

- Calibrations
- Set ppm and % calibration gas levels
- Upload firmware upgrades
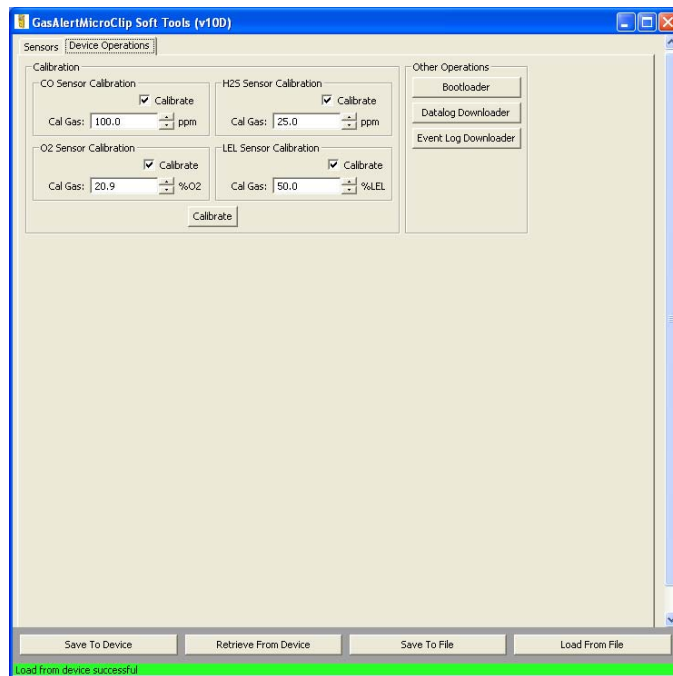- Download datalogs and event logs

Figure 13. GasAlertMicroClip Soft Tools (Device Operations Tab)

CO/O₂/H₂S/LEL Sensor Calibration

The **CO/O2/H2S/LEL** sensor calibration sections are used to select the gas ppm and % levels of the sensors being calibrated. To calibrate the sensor(s) from the **Device Operations** tab, complete the following:

1. Activate the detector. Connect the IR Link to the detector and the computer USB port.

2. Check the **Calibrate** checkbox for each sensor being calibrated.

   Example 1: If calibrating using all four gases with a 4-gas cylinder, check all of the **Calibrate** checkboxes.

   Example 2: If calibrating just CO, click only the **CO Calibrate** checkbox.

3. If required, use the ↕ buttons to increase/decrease the **Cal Gas ppm** or **%** level to match the gas cylinder level.

4. Click the **Calibrate** button to begin calibration. Refer to the *GasAlertMicroClip User Manual* for calibration procedures.

Other Operations

This section provides function buttons that are used to

- upload firmware upgrades (**Bootloader**),
- download datalogs (**Datalog Downloader**), and
- download event logs (**Event Log Downloader**).

Bootloader Button: This button is used to upload new firmware revisions. To obtain firmware revision files, contact BG Technologies.

⚠ Warning

Uploading new firmware automatically clears all datalogs on the detector. Ensure that all datalogs are transferred to Soft Tools and then saved to file prior to performing the firmware update.

To upload new firmware, complete the following:

1. Obtain the new firmware file and save it to the desired directory.

2. Activate the detector. Connect the IR Link to the detector and the computer USB port.

3. Click the **Bootloader** button. The GasAlertMicroClip Bootloader pop-up displays.
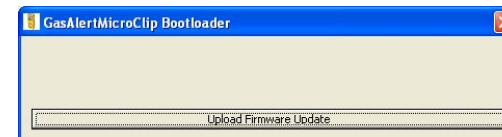

Figure 14. Upload Firmware Update

4. Click   **Upload Firmware Update**. The Choose Firmware File to Upload window opens.

5. Select the required firmware file and click **Open**. The firmware begins uploading. The upload process requires approximately 30 seconds. When the upload is completed, **Firmware Update Successful** displays.

   The detector then verifies the firmware and reprograms itself for approximately 10 seconds. The detector automatically resets to run the new firmware.

   If an error message displays that the firmware upload was not successful, refer to Troubleshooting.

Datalog Downloader Button: This button is used to transfer datalogs from the detector to a file/folder that can be opened/displayed in a software application such as,

- Fleet Manager (future option),
- Excel (default), and
- Access, Word, and Notepad (future options).

To download a datalog, complete the following:

1. Activate the detector. Connect the IR Link to the detector and the computer USB port.

2. Click   the **Datalog Downloader** button. The datalog(s) automatically begin downloading. A browser opens.

3. **Excel:** Locate the file and double-click. The file automatically opens in the default application Excel.
   Other Applications: Open the file from the desired application.

Event Log Downloader Button: This button is used to transfer event logs from the detector to a software application such as,

- Fleet Manager (future option),
- Excel (default), and
- Access, Word, and Notepad (future options).

To download an event log, complete the following:

1. Activate the detector. Connect the IR Link to the detector and the computer USB port.

2. Click   the **Event Log Downloader** button. The event log(s) automatically begin downloading. A browser opens.

3. **Excel:** Locate the file and double-click. The file automatically opens in the default application Excel.
   Other Applications: Open the file from the desired application.

Transferring Settings

There are several options available to communicate data between Soft Tools and the detector. Each option is accessed via the buttons located at the bottom of the window.

- **Save To Device**
- **Retrieve From Device**
- **Save To File**
- **Load From File**

Successful: The status bar at the bottom of the window changes to green and displays the function performed and that it was successful.

Example: **Save to Device Successful**

Unsuccessful: If the retrieval fails, the status bar at the bottom of the window changes to red and displays the function performed and that it was unsuccessful. Repeat steps #1-4 again. If still unsuccessful, contact BW Technologies.

Example: **Save to Device Unsuccessful**

Save to Device

The **Save To Device** button is used to transfer the currently displayed settings on the **Sensors** tab to the detector.

1. Activate the detector. Connect the IR Link to the detector and the computer USB port.

2. From   the **Sensors** tab, select settings, make modifications, or open a saved file of previously configured settings (click **Load from File** button to load saved settings).

3. When all of the settings are confirmed, click **Save to Device** to transfer the settings to the detector.

Retrieve from Device

The **Retrieve From Device** button is used to retrieve the current settings of a detector. From the **Sensors** tab, the displayed settings can then be

- viewed,
- modified,
- used to setup other detectors, and/or
- saved to file.

1. Activate the detector. Connect the IR Link to the computer and the detector.

2. Open Soft Tools.

3. Click   **Retrieve from Device**. The current settings of the detector display on the **Sensors** tab.

Save to File

Settings can be saved to files that can be used to set up additional detectors and/or to maintain a record of detector settings.

1. From   the **Sensors** tab, select the sensor settings and enable/disable the required user and language options.

2. Click   **Save To File**. The browser opens.

3. Select the required file/folder and click **Save**.

Load from File

The **Load From File** button is used to access and display files of saved settings.

1. From Soft Tools, press **Load From File** to access the browser.

2. Select the required file. The settings automatically display on the **Sensors** tab.

3. If the loaded settings are being used to set up a detector, refer to Save to Device.

Troubleshooting

If a problem occurs, refer to the following troubleshooting solutions. If the problem persists or a solution is not provided, contact BW Technologies.

- Firmware Upload Fails

- Unable to Locate Drivers

- Error Uploading Data and Communication Errors
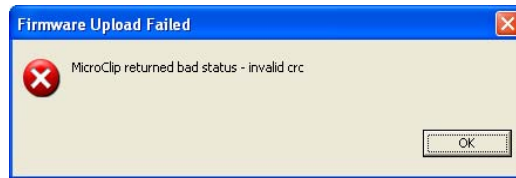
Firmware Upload Fails

Figure 15. Firmware Upload Failed

If the Firmware Upload Failed pop-up displays, complete the following:

1. Click [OK] to close the Firmware Upload Failed pop-up.

2. On the GasAlertMicroClip Bootloader pop-up, click **Upload Firmware Update** again.

Unable to Locate Drivers

If the Unable to Locate Drivers pop-up displays, complete the following:

1. From your desktop, right-click **My Computer**.

2. From the drop-down menu, click **Properties**. The System Properties window displays.

3. Click the **Hardware** tab to display the hardware information.

4. Click [Device Manager]. The Device Manager selection window displays.

A yellow **?** displays beside one of the following:

- For desktop computers: [+] Universal Serial Bus controllers **?**

- For laptop computers: USB Device **?**

5. Double-click **?**. The USB Device Properties window displays.

6. From the Device Properties window, click [Reinstall Driver...]. The Hardware Update Wizard window displays.

7. Click ◯ **Yes, this time only** and then click [Next>].

8. The next wizard window displays.

9. Insert the Soft Tools CD into the computer. Click ◯ **Install the software automatically [Recommended]** and then click [Next>]. The USB Device Search window displays.

When the driver software is located, a warning message displays.

Note

The Soft Tools software is thoroughly tested by BW Technologies and will not harm your computer system.

10. Click [Continue Anyway]. The installation begins and requires approximately 30 seconds to complete.

11. When the installation is complete, click [Finish] to close the Hardware Update Wizard. The Hardware Wizard closes and the BW Technologies IR Link Adapter Properties window displays.

12. Verify the **Device Status** information.

Successful Installation: If **This device is working properly** displays, the driver software is successfully installed. Click [Close] and exit the remaining windows and pop-ups.

Unsuccessful Installation: Click [Troubleshoot...] for solutions. If the installation is still unsuccessful, contact BW Technologies.

Error Uploading Data and Communication Errors

Figure 16. Error Uploading and Communication Pop-up

1. If the Error Uploading Data pop-up displays, verify that all connections are secure. Disconnect and reconnect if required. Click [OK] to close the popup.

2. Click **Upload Firmware Update** again.

Accessories

To order additional Connectivity Kits, contact BW Technologies.

Connectivity Kit includes**:**   Part #: **GA-USB1-IR**

- USB cable

- IR Link Adapter

- GasAlertMicroClip Soft Tools Software CD-ROM

- GasAlerMicroClip Soft Tools Instruction Sheet

Contacting BC⊛F≕B˙; FCI D Technologies

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Visit Boldrin Group Technologies' web site at: www.boldringroup.it

Warranty

LIMITED WARRANTY & LIMITATION OF LIABILITY

BG Technologies warrants this product to be free from defects in material and workmanship under normal use and service for a period of two years, beginning on the date of installation. This Warranty is valid only if the product is activated by the date on the package. This warranty extends only to the sale of new and unused products to the original buyer. BG's warranty obligation is limited, at BG's option, to refund of the purchase price, repair, or replacement of a defective product that is returned to a BG authorized service center within the warranty period. In no event shall BG's liability hereunder exceed the purchase price actually paid by the buyer for the Product.
This warranty does not include:
  a) fuses, disposable batteries or the routine replacement of parts due to the normal wear and tear of the product arising from use;
  b) any product which in BG's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation, handling or use;
  c) any damage or defects attributable to repair of the product by any person other than an authorized dealer, or the installation of unapproved parts on the product; or

The obligations set forth in this warranty are conditional on:
  a) proper storage, installation, use, maintenance and compliance with the product manual instructions and any other applicable recommendations of BG;
  b) the buyer promptly notifying BG of any defect and, if required, promptly making the product available for correction. No goods shall be returned to BG until receipt by the buyer of shipping instructions from BG; and
  c) the right of BG to require that the buyer provide proof of purchase such as the original invoice, bill of sale or packing slip to establish that the product is within the warranty period.

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