IR Link (MGT) User`s Manual





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- ▲ Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the intended use including damage by fire, lightening, or other hazard, voids liability of the manufacturer.
- \triangle Use the device in a clean environment where there is no hazardous gases.
- ▲ Severe vibration or shock to the device may cause the device malfunction.
- ▲ Do not leave or use the device at the watery place or at where there is any liquid.
- ▲ Before operation, read the manual carefully and follow all the instructions.



1. Overview

1.1 Description

The IR Link is a device for conveniently communicating with the MGT multi gas detectors. It uses dedicated software provided by SENKO CO., LTD to communicate with the monitor. IR Link enables users to set up calibration concentration levels, alarm set points, and configuration options as well as download logs.

1.2 Instructions and Parts



No.	Description		
1	Blue LED blinks while any applied task		
2	Red LED on (10 seconds) when connecting to a PC		
3	IR connection Screen		
4	USB Connection port to PC		



2. Downloading and Installing the Driver

2.1 Download

To download the Software, visit the SENKO CO., LTD homepage (<u>www.senko-detection.com</u>) or contact SENKO authorized reseller or service center.

2.2 Software Installation

- ✓ After downloading the file, navigate to the saved location.
- ✓ Double click for running an installer.
- ✓ Click "Read More" and "Run Away" if you receive a warning message.
- ✓ The IR Link Setup window will open. Click "Next".



- ✓ Select Installation Folder.
- ✓ To install to a different folder, click "Browse" or enter the link.
- ✓ To install in default folder, click "Next"





- \checkmark The Installation is ready to begin.
- ✓ Click "Install".





✓ Click "Yes" if you receive warning message.



- ✓ The IR Link Setup Wizard is complete.
- ✓ Click the "Finish" button to exit the Setup Wizard.

💀 IR Link Setup		×
	Completing the IR Link Setup Wizard	
	Dick the "Finish" button to exit the Setup Wizard.	
	< Back Finish Cancel	

✓ You may run the Driver now and connect to your MGT now.

Note: Do not open the software if IR Link is not plugged to PC.



3. Launch the Software

3.1 Software Interface

To launch the Software, plug the IR Link to PC and click the icon, allow the software to make changes to the PC (click "Yes"). When Software is opened, the fields are grayed out and before it can be used, the IR Link must be connected to the MGT.

S SENKO IR Link PC v1.7.2	×
File Tools Help	
READ WRITE LOG	Firm OPEN
Sal-Sal-	
Serial Number	Sensor Type
	Low Alarm
Firmware Version	High Alarm
User ID/Message	STEL Alarm
Direlation	TWA Alarm
Display	Cal Concentration
Stealth	Cal Time(sec)
Self Test(hour)	Cal Interval(day)
,	Bump Interval(day)
	SENKO

3.2 Open the IR Link communication port

By clicking "Open" button, the software allows communication between IR Link and computer. When communication is successfully established, "Read Complete" message pops up and the IR Link automatically scans for an available device.







"Read Complete" alerts when established successful communication.

3.3 Connection Errors

3.3.1 Fail Port Open



3.3.2 Send Time Out



"Fail Port Open" message pops up if IR Link connection is not found between IR Link and the PC. In this case, check all cables are connected correctly.

"Send Time Out" message pops up if IR Link connection is not found between IR Link and the MGT. In this case, put the IR Link facing up while MGT facing down. Leave around 1cm distance between IR Link and MGT Infrared port.

4. MGT Configuration Screen and Functions

4.1 Configuration Screen

When IR Link automatically scans for an available device after clicking "Open" button, user will be available receive all information on window as shown below:



S SENKO IR Link PC v1.7	.2					×
File Tools Help						
READ WRI		Firm		16 💌 OSE		
Serial Number Firmware Version User ID/Message	2.2 SAMPLE	Low Alarm High Alarm STEL Alarm TWA Alarm	LEL 10.0 + 20.0 +	02 19.5 ÷ 23.0 ÷	CO 10.0 + 20.0 + 200.0 + 30.0 +	H2S 10.0 + 15.0 + 15.0 + 10.0 +
Advenced Option TWA Method TWA Interval STEL Interval 100% LEL	OSHA V 8 4 hr 15 4 min 5.0 4 %Vol	Sensor Enabled Cal Interval Bump Interval Calibration Gas	✓ LEL n/a . n/a . 50.0 .	 ✓ O2 n/a . n/a . 17.0 . 	CO n/a + n/a + 100.0 +	✓ H2S n/a + n/a + 25.0 +
Check Option	Maintenance Notifi OFF Lock		Lock By %vol CH4	□ Auto	Zero Ith	

4.2 Functions (Tool)

Tool		
READ	TE LOG	Firm

- **READ:** By pressing the "Read" it displays current settings of the MGT and will discard any unsaved changes in the Tab.
- WRITE: "Write" allows a user to save newly customized configurations and settings.
- LOG: By clicking "LOG", user can download and display a list of the events (see 4.2.1).

CALIBRATION: To perform "Zero" and/or "Span" Calibration via IR Link (see 4.2.2).

FIRM: Upgrade current firmware to latest one to get more benefit from your device. The latest firmware is available to download in our homepage.



4.2.1 Log

Log Download		>
Log Type		Erase
Event Log	-	Download
Event Log Event + Data Log		

There are two option events are available to download from the Log Type dropdown. User can choose to "Download" or "Erase" either "Event Logs" or "Event + Data Log". By clicking "Download", the software asks to select a location to save the file. After selecting the location to save, the progress bar will be filled from 0% to 100%.

4.2.2 Calibration

Calibration				×
Serial				
Gas T	уре	LEL / 02	/ co	/ H2S
Conc	Apply	rresh air th	at free of	hazardous
Cal Ti	me(s)	0		
		0%		
			ZERO	SPAN
			2010	

User can perform both ZERO and SPAN calibrations via IR Link. When click ZERO, the software asks, "Do you want to start Zero Calibration?". Click "Yes" to proceed the calibration. The process of the SPAN calibration is also same.

Note: Keep the screens of the IR Link and MGT aligned until the download or calibration complete. Erased Logs cannot be recovered.



4.3 Functions (Basic Option)

Basic Option						
			LEL	02	со	H2S
Serial Number		Low Alarm	10.0 🔹	19.5 🔹	10.0 🛨	10.0 🔹
Firmware Version	2.2	High Alarm	20.0 🔹	23.0 🔹	20.0 🛨	15.0 🔹
User ID/Message	SAMPLE	STEL Alarm			200.0 🛨	15.0 🔹
		TWA Alarm			30.0 🛨	10.0

Serial Number: Serial number of MGT (not adjustable).

Firmware Version: The current firmware version of MGT.

User ID/Message: The User ID can be used to add a usage message.

Low / High Alarm: Low and High alarm setpoints of the device. User can adjust alarms in compliance with international or local standards.

STEL / TWA Alarm: STEL and TWA alarm setpoints of the device. User can adjust alarms in compliance with international or local standards.

4.4 Functions (Advanced Option)

- 6	dvenced Option						
	avencea option						
	TWA Method	OSHA 💌	Sensor Enabled	🔽 LEL	▼ 02	CO 🟹	🔽 H2S
	TWA Interval	8 🕂 hr	Cal Interval	n/a 🔸	n/a 🔸	n/a 🔸	n/a 🕂
	STEL Interval	15 🕂 min	Bump Interval	n/a 🕂	n/a 🕂	n/a 🕂	n/a 🕂
	100% LEL	5.0 ÷ %Vol	Calibration Gas	50.0 +	17.0 +	100.0 +	25.0 +

TWA Method: The Time Weighted Average method calculates the average airborne exposure. It is selectable either OSHA or ACGIH.

TWA Interval: The interval can be selected n/a or between 4~15 hours (default 8hours).

STEL Interval: The Short-Term Exposure Limit is an average exposure limit over a short period of time. Can be selected n/a or between 5~15minutes.

100% LEL: The equality of %vol to %LEL. Default is Methane (5%vol = 100%LEL).

Sensor Enabled: Each of the sensor of MGT can be enabled or disabled.



Cal Interval: The calibration reminder alerts every fixed day (0 (n/a) ~ 365).

Bump Interval: The Bump test reminder alerts every fixed day (0 (n/a) ~ 365).

Calibration Gas: This allows a user to enter correct concentration of the gas cylinder.

4.5 Functions (Check Option)

ſ	- Check Option			
	🔲 SAFE Display	Maintenance Notification	Dock Lock	🔲 Auto Zero
	Auto Hold	OFF Lock	LEL By %vol CH4	Stealth

SAFE Display: In fresh air, "Safe Zone" message will be displayed. Alarms will be activated when gas is present.

Auto Hold: Although users leave the hazardous area, alarms will remain activate unless pressing the button.

Maintenance Notification: The reminder alert by LED flash when calibration and Bump test due date.

OFF Lock: Disables MGT to deactivate or turn off until uncheck the box.

Dock Lock: Disables MGT to calibrate without using Docking Station or IR Link.

LEL By %vol CH4: Adjust the maximum range of %LEL by %vol based on 100%LEL.

Auto Zero: The device automatically performs Zero calibration each time whenever turning on the MGT. If this option is selected, MGT must turned on at the Safe Zone where, there is no gas.

Stealth: Users can turn off the buzzer, LED, and vibration in special circumstances.



4.6 Optional Functions



Load: To load and install the previously saved configuration as (*cfg) file.

Save: To save the current configurations as (*cfg) file.

Exit: To finish and close the IR Link Wizard.

Calibration: User can perform both ZERO and SPAN calibrations via IR Link (see 4.2.2).

Log Read: To download and display a list of the events (see 4.2.1).

Log Erase: To purge the device memory (erased logs cannot be recovered).

FW Upgrade: Upgrade current firmware to latest one to get more benefit.

About: Display brief information about Manufacturer`s profile.



5. Specification

Model	IR Link
Size	51 x 44 x 20mm (2 x 1.73 x 0.78 in.)
Weight	24.3g
Temperature	10 - 40°C / 50 - 104°F
Humidity	5 - 95% non-condensing relative humidity
Range	50 - 406mm (2.0 - 16.0 inches)
Power	USB Power (5V)
Reading & Modifications	Alarm Set points to the Senko Multi Gas Trap
Reporting	Event logs From the Senko Multi Gas Trap Firmware upgrades to the Senko Multi Gas Trap
Operating System	Compatible with Microsoft Windows XP, Vista, and Windows 7
Warranty	2 years from activation, 1 year shelf life



Limited Warranty

SENKO warrants this product to be free of defects in workmanship and materialsunder normal use and service for two years from the date of purchase from the manufacturer or from the product's authorized reseller.

The manufacturer is not liable (under this warranty) if its testing and examination disclose that the alleged defect in the product does not exist or was caused by the purchaser's (or any third party's) misuse, neglect, or improper installation, testing, or calibrations. Any unauthorized attempt to repair or modify the product, or any other cause of damage beyond the range of the intended use, including damage by fire, lightening, water damage or other hazard, voids liability of the manufacturer.

In the event that a product should fail to perform up to manufacturer specifications during the applicable warranty period, please contact the product's authorized reseller or SENKO service center at 82-31-492-0445 to repair/return information.



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