G-Finder Infrared Communication Module Instruction Manual

G-Finder Infrared Communication Module is to check diverse states and change setups by connecting G-Finder Single (portable single gas detector) and G-Finder Multi (portable multi gas detector) to a PC.

Warning

G-Finder Infrared Communication must be utilized in safe area without any risk of explosion.

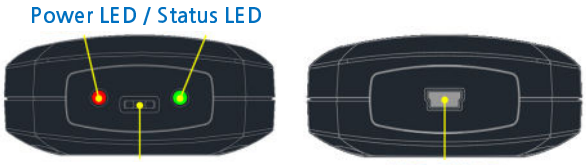
Notice

1) For fully operative infrared communication between G-Finder Infrared Communication Module and detector, put the infrared sensors to face each other without any communication obstacle between the module and detector in consideration of the recommended distance and angle.

2) For more effective communication between G-Finder Infrared Communication Module, detector and PC, it is recommended to use in a safe environment without a disrupting signal.

   G-Finder Infrared Communication Module and PC software are operable in a PC with Windows XP, 7, or 10. Prior to linking the PC software, users need to install the USB drive shared in the Company's website first. In the event of operating on Window XP, a separate file for Windows XP execution must be installed.

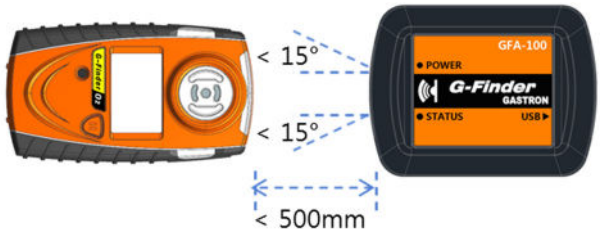
1. Name of parts

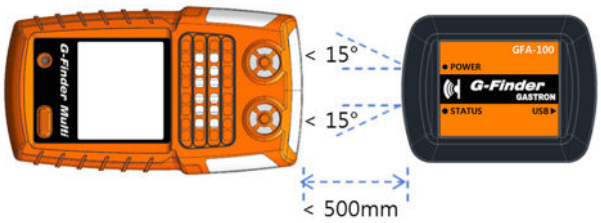


2. Specifications

Heading	Description
Size	80 x 60 x 26.5 mm
Weight	100 g (including the cable provided in the basic package)
Operating temperature	-20°C ~ 50 °C
Status light	Light emitting diode (LED)
Recommended distance communication	Within 500 mm
Recommended angle for communication	15° (for module / detector infrared sensor)
Power	PC - USB port (USB mini B to USB A)

3. Recommended installation for G-Finder Infrared Communication Module





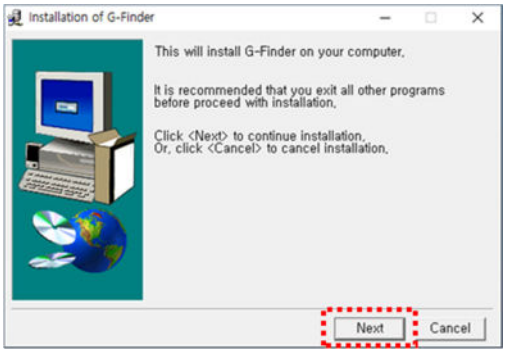
4. PC software installation

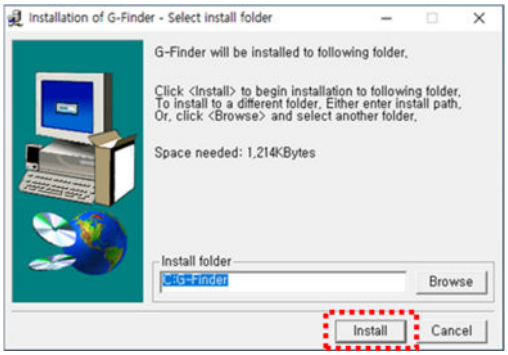
1) Before linking the PC software, the USB driver shared in the Company's website should be installed first to recognize G-Finder Infrared Communication Module in your PC.

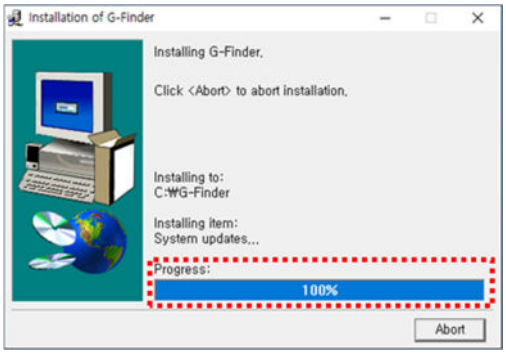
2) Please install the driver by choosing a suitable file for your PC specifications among the provided USB driver installation files.

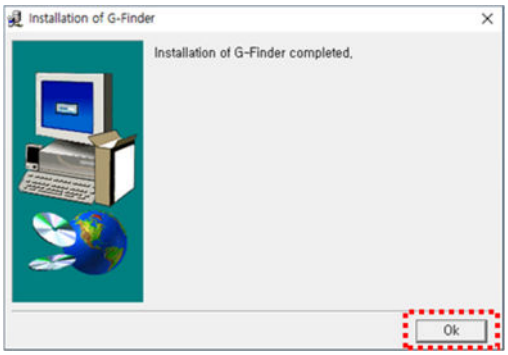
3) Please execute the PC software installation file as follows. The installation file is available at the Company's website.
http://www.gastron.com/index.php

4) Execute the downloaded installation file, and the installation window as below pops up. Please proceed installation by following the guide on the installation popup.





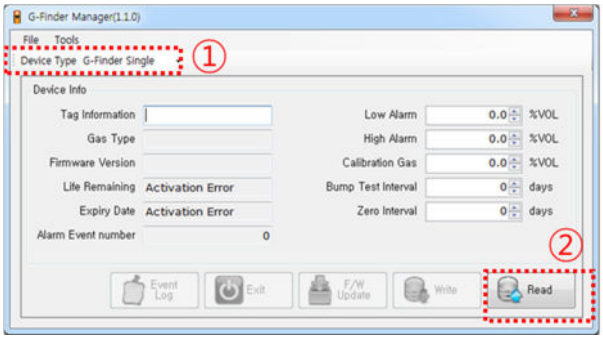


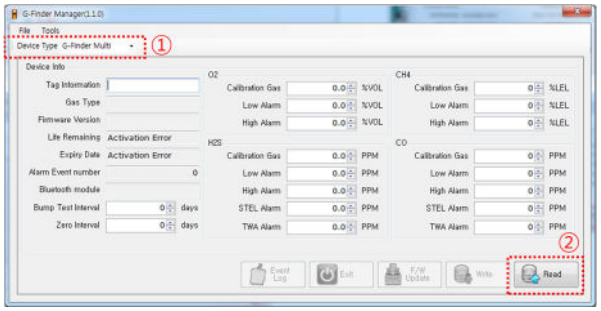


5. PC software detector connection

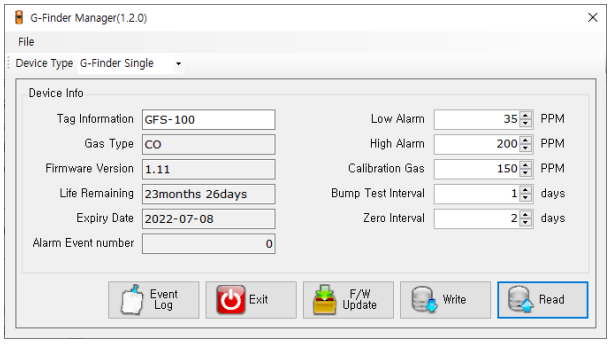
1) Make the "I-ON" state through the IRDA MODE of G-Finder Single or G-Finder Multi. Then, arrange the detector and G-Finder Infrared Communication Module to face each other by referring to 『 3. Recommended Installation for G-Finder Infrared Communication Module 』.

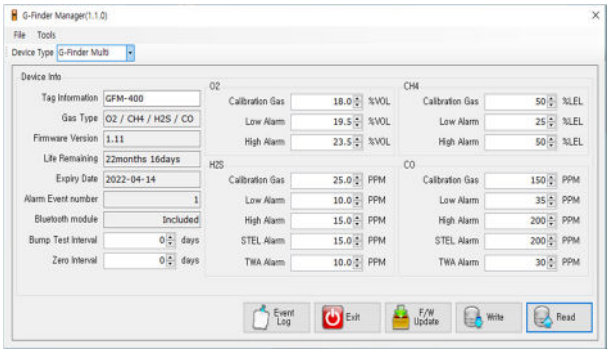
2) Execute the PC software, choose the corresponding G-Finder type, and click “Read” to connect the detector and PC software. If the connection is successful, “Completed Read” message will show, and if unsuccessful, error message will be popped up. Please see 『 8. Communication errors 』 for more details.





6. Detailed device data





6.1. Unchangeable items

1) Gas Type

Shows detector gas type. In the case of G-Finder Single, 1 gas type subject to measurement is displayed among the 3 gases of O_2, CO, and H_2S. In the case of G-Finder Multi, all of the 4 gases subject to measurement - O_2, CH_4, H_2S, and CO - are indicated.

2) Firmware Version

Detector firmware version is indicated.

3) Life Remaining

The remaining life of detector is shown.

※ Remaining life is calculated based on the time elapsed from the initial activation.

4) Expiry Date

The expiry date of detector is shown.

※ Expiry date is calculated from the day of initial activation.

5) Alarm Event number

The number of alarm event(s) is indicated, if there is any record of alarm occurrence.

6) Bluetooth module (G-Finder Multi)

State of Bluetooth module inclusion is indicated. In the case of a module-applied G-Finder Multi product, “Included” is shown, and a product without module application, “Not Included”.

※ This indication is provided for G-Finder Multi only.

6.2. Changeable items

1) Tag Information

Changeable by a user. The name of a device in communication is indicated.
Indicate up to 7 letters including blank(s).

2) Low / High / STEL / TWA Alarm

Changeable by a user. Low / High / STEL / TWA alarm setups are indicated.

※ STEL / TWA alarm function is provided in G-Finder Multi. This function is not displaying in G-Finder Single nor in the device data of PC software.

※ When changing alarm setups, please check if the change conforms to the applicable guidelines in the region.

3) Calibration Gas

Changeable by a user. The concentration setup of calibration gas is indicated.

4) Bump Test Interval

Changeable by a user. The bump test interval setup is indicated in days. If Bump Test is not proceeded by the date based on the set interval, a bump test sign is indicated on the screen and disappears upon bump test completion. (Set 0 to inactivate Bump Test Interval)

5) Zero Interval

Changeable by a user. The zero calibration interval setup is indicated in days. If Zero Calibration is not proceeded by the date based on the zero interval, calibration sign is displayed and disappears upon calibration completion. (Set 0 to inactivate Zero Interval)

7. Function buttons

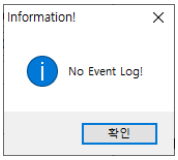
1) Event Log

Event log button

User can check the alarm event logs, if there any alarm event with occurrence record in “Alarm Event number”, among the detailed device data.

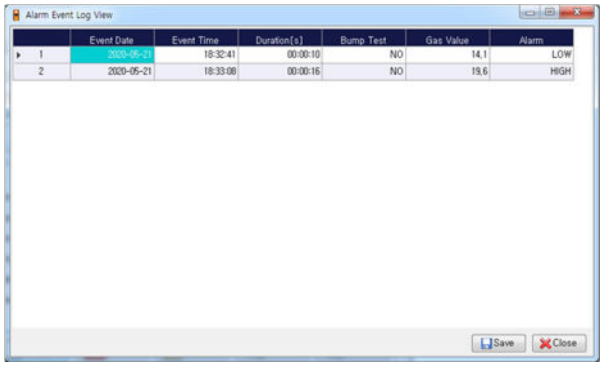
1-1) Event log view

In the event of a logged alarm event, click the button, and a popup is shown to check the corresponding record. In the event of no recorded alarm event, the following popup appears, if the button is clicked.



A user can check the details of event log(s) via the popup as follows;

- event date, time, duration, bump test y/n, max alarm gas value, alarm details
- Additional details provided for G-Finder Multi: STEL, TWA max gas values for CO / H_2S; STEL, TWA alarm y/n



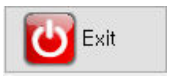
〈Example of event log view for G-Finder Single〉

〈 Example of event log view for G-Finder Multi 〉

1-2) Event log data save

A user can click ‘Save’ to save the logs shown through the popup for event log check in a separate file. 3 file forms are supported - Excel File (*.xlsx), CSV (*.csv), and TEXT (*.txt).

2) Exit



Exit button

Exit from the communication link between the detector and module.

3) F/W Update

Firmware update button

Firmware update in G-Finder detector is supported through the PC software. Firmware update is not necessary unless otherwise notified by the Company. The latest firmware

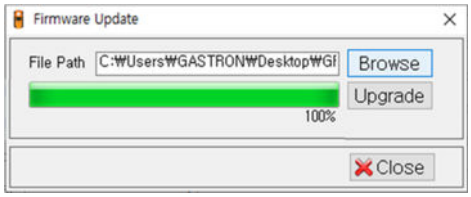
version of an involved detector is available for download at the Company's website.
http://www.gastron.com/index.php
If firmware update is necessary for your G-Finder detector, please click the corresponding function button and progress firmware update.

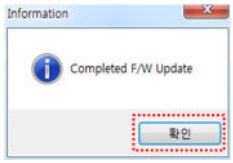
※ Before updating the firmware, a user needs to make sure to download proper firmware material. **In the event of updating with an inappropriate firmware material, G-Finder detector may become inoperable. Users must be extra careful.**

With a proper firmware material in hand, click Firmware Update, and the following popup appears to select a corresponding firmware material and progress upgrade. Click 'Browse' to select a suitable firmware material, then, 'Upgrade' to implement upgrade. It takes approximately 40 seconds.

※ Please take extra care that the G-Finder Infrared Communication Module and detector do not move during firmware upgrading. If they move while upgrading and cause any infrared communication problem, a fatal functional error may occur to make it impossible to use the detector.

In the event of a successful firmware upgrade, a popup containing "Completed F/W Update" is displayed.

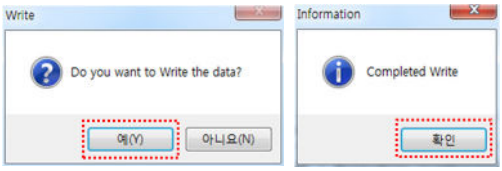




4) Write

Write button

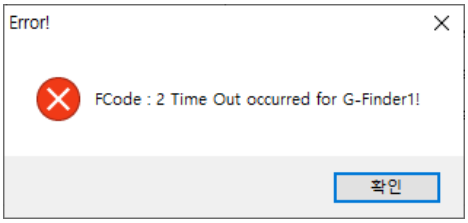
Check if the changes are correct, then make sure to click 'Write' to save them in the detector. Even though user changed settings in the software, 'Write' button must be clicked, otherwise the changes will not be automatically applied to the detector. Upon successful setup change, a popup containing "Completed Write" appears.



8. Communication errors

In the event of a problem in a communication instruction via PC software or data transmission between G-Finder Infrared Communication Module and detector, a popup related to error is displayed. In the event of a communication error, please refer to the followings;

1) Error in PC software instruction communication



〈 Example of error in PC software instruction communication 〉

In the event of no proper response by the detector to an instruction sent from the PC software within a certain period of time, a popup of error in PC software instruction communication is displayed. Please refer to the followings and check your environment of use. If the error popup shows repeatedly, please contact the Company's service center.

1-1) Please check the firmware version of G-Finder detector. (PC software

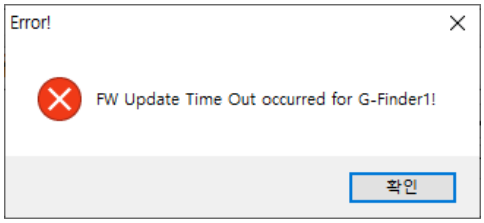
functionality is not provided for detectors below version 1.10.)

1-2) Please refer to 『 3. Recommended installation for G-Finder Infrared Communication Module 』 and check if the place arrangement is correct.

1-3) Please check if G-Finder detector's LCD shows "I-ON" without an abnormality. If it is not displayed, please redo the detector connection process by referring to 『 5. PC software detector connection 』.

1-4) Please check if the power LED of G-Finder Infrared Communication Module is on without an abnormality. If it is not on, it is necessary to check if the USB port is well connected in Device Manager. If you need any help for this, please contact the Company's service center.

2) F/W Update error



〈 Example of F/W Update error 〉

In the event of no proper response from G-Finder detector while firmware updating in the PC software, a time out error occurs as shown in the example above. Please check your environment of use by referring to the followings; If the error message is showing repeatedly, please contact the Company's service center.

2-1) Please check the firmware version of G-Finder detector. (PC software functionality is not provided for detectors below version 1.10.)

2-2) Please refer to 『 3. Recommended installation for G-Finder Infrared Communication Module 』 and check if the place arrangement is correct.

2-3) For G-Finder Single, please check if "F-DN" is correctly displayed on the detector LCD; and, for G-Finder Multi, "F/W-UPDATE". In the event of showing "I-ON", please redo the firmware update process. If you need any help for this, please contact the Company's service center.

2-4) Please check if the power LED of G-Finder Infrared Communication Module is properly on. If the LED is not on, it is necessary to check if the USB port is well connected in Device Manager. If you need any help for this, please contact the Company's service center.

9. Manufacturer Information

In the event of any problem in the product, please contact through the following information;

1) Address: Gastron Co., Ltd.
23, Gunpocheomdansaneop 1-ro, Gunpo-si, Gyeonggi-do, 15881. Rep. of Korea

2) Tel: +82-31-490-0800

3) Fax: +82-31-490-0801

4) URL: www.gastron.com

5) e-mail: gastron@gastron.com

10. Revision history

REV.	CONTENTS	DATE
1.0	Initial revision	2020.06.23