

WIRELESS SMOKE & HEAT ALARM

INSTALLATION INSTRUCTIONS

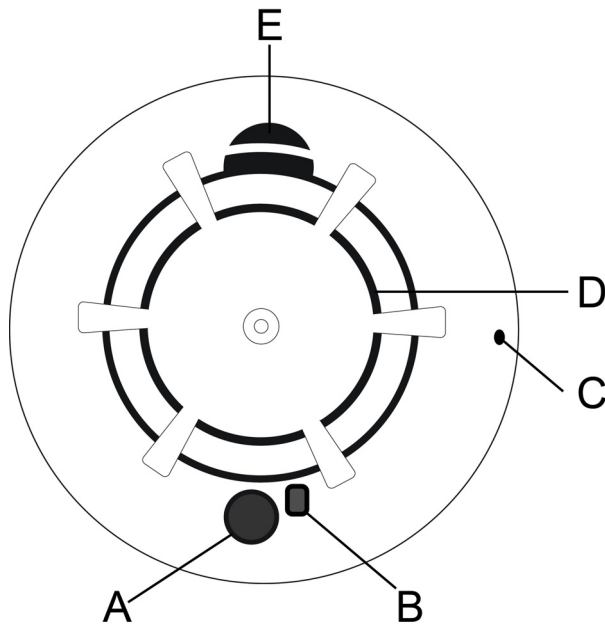
The Wireless Smoke & Heat Alarm (2GIG-SMKT4-433) is a point-type, wireless, battery powered alarm that detects excessive smoke and heat in buildings. The alarm uses photoelectric technology to detect the amount of scattered light caused by smoke particles from a fire. The heat alarm can be triggered by a quick rate of rise condition.

Features include:

- Smoke and heat detection
- Self-contained, status LED, and built-in 85 dB Piezo sounder
- Supervised transmitter
- Test/Hush button
- Easy installation and programming

NOTE: Use the 2GIG Control Panel to configure the Wireless Smoke & Heat Alarm to receive smoke and heat alarms. To learn how to program a wireless sensor, see the Control Panel's *Installation & Programming Guide*.

Figure 1 Wireless Smoke & Heat Alarm



- A Test/Hush Button
- B LED Indicator
- C Anti-Tamper Release
- D Sensing Chamber
- E Piezo Sounder

CAUTION: This alarm contains a built-in 85 decibel Piezo sounder. Long or repeated exposure to sounds at or above 85 decibels can lead to Noise-Induced Hearing Loss (NIHL).

Contents

Verify that the package includes the following:

- 1—Wireless Smoke & Heat Alarm
- 2—Plastic Wall Anchors with Phillips Head Screws
- 3—1.5 V AAA Duracell MN2400 Batteries

Mounting the Alarm

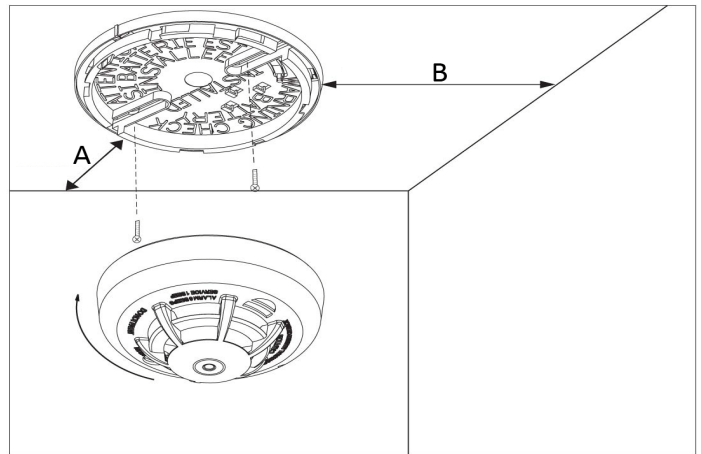
This alarm must be installed by qualified personnel in accordance with all regulations defined by national, state, and local fire safety authorities.

To mount the alarm:

- 1 Select the mounting location. The alarm should be placed either on the ceiling or up high on a wall.

NOTE: Ensure that the mounting location is a minimum of four (4) in (100 mm) from each wall as shown in *Figure 2* below.

Figure 2 Mounting the Alarm

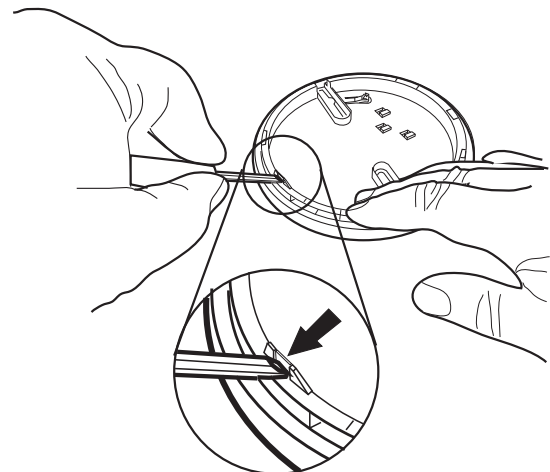


- A 4 in (100 mm)
- B 4 in (100 mm)

- 2 Install the batteries (included) in the alarm. See *"Inserting and Replacing the Batteries"* on page 3.
- 3 (Optional) If there is a need to activate the built-in anti-tamper lock, carefully remove the center of the anti-tamper tab on the backplate shown in *Figure 3* below.

NOTE: This locks the Wireless Smoke & Heat Alarm to its backplate and requires the end user to depress the anti-tamper release to separate the alarm from its backplate.

Figure 3 Anti-Tamper Lock—Remove Center of Tab on Backplate

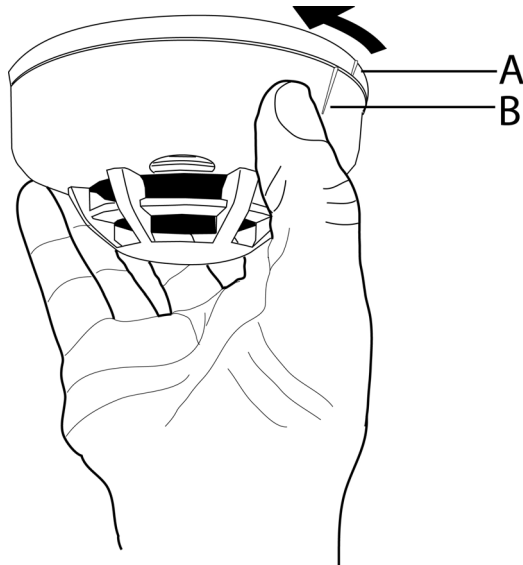


NOTE: When the anti-tamper lock is engaged, use a narrow implement (e.g., a stylus or screwdriver) to depress the anti-tamper release (see C in *Figure 1* on page 1). This will allow you to separate the alarm from its backplate.

- 4 On the intended surface, use the two (2) Plastic Wall Anchors to hang the smoke alarm backplate on the ceiling or wall.
- 5 Maneuver the alarm's backplate so the screws are at the elbow of the screw slots. Secure the backplate to the ceiling or wall.
- 6 Attach the alarm to the backplate by turning the smoke alarm in a clockwise direction until the alignment mark and arrow meet. See *Figure 4* below.

When properly closed, the unit should snap firmly into place.

Figure 4 Wireless Smoke & Heat Alarm—Alignment Marks



- A Alignment Mark
B Alignment Arrow

Programming the Alarm into the Control Panel

Before performing the tests described in *Maintaining the Alarm* below, the wireless sensor must be programmed into the Control Panel:

- 1 Follow the steps detailed in “*Wireless Sensor Programming*” in the Control Panel’s *Installation & Programming Guide*.
- 2 At the programming question titled **Q: Enter RF Sensor # Serial Number (7 Digits)**, place the Control Panel into learning mode.
- 3 When the **Activate a Sensor to Learn its ID** screen appears on the Control Panel, activate the wireless sensor as follows:
 - 3a Hold down the **Tamper** button (see C in *Figure 5* on page 3) or the **Test/Hush** button (see A in *Figure 1* on page 1) for approximately six (6) seconds.

TIP: To use the **Test/Hush** button, the alarm must be in the tamper position (i.e., the alarm must be separated from its backplate).

After you release the button, the wireless sensor transmits its TX ID or serial number to the Control Panel.

- 3b On the Control Panel screen, verify that the **Type** and **ID#** was received.
- 3c Continue with the wireless sensor programming steps.
- 4 At the programming question titled **Q: Select RF Sensor # Loop Number**, specify the appropriate loop number for the sensor:
 - **Loop 1.** Enables the smoke detection function.
 - **Loop 2.** Enables the heat detection function.

- 5 Complete the wireless sensor programming steps. Then save and exit out of programming mode on the Control Panel.

After programming the alarm into the panel, perform all of the tests described in *Maintaining the Alarm*.

Maintaining the Alarm

Alarms are only effective when properly installed, maintained, and tested. To ensure proper alarm operations, perform the maintenance tasks as specified in the table below:

Maintenance Task	Frequency	For instructions, see:
General Alarm Test	At least once a week AND After replacing the batteries	<i>General Alarm Test</i>
Smoke Test	At least once a month AND After replacing the batteries	<i>Smoke Test</i>
Direct Heat Test	At least once a month AND After replacing the batteries	<i>Direct Heat Test</i>
Replace the Batteries	At least once a year OR When indicated by a low battery alert	<i>Inserting and Replacing the Batteries</i>
Clean the Alarm	Once a year OR When indicated by the <i>Trouble</i> status	<i>Cleaning the Alarm</i>

TIP: When the Wireless Smoke & Heat Alarm requires maintenance, the LED no longer flashes. On the Control Panel, the *Trouble* status and name of the programmed zone for the sensor displays on the screen.

IMPORTANT: Before testing the alarm, notify the appropriate individuals and the remote monitoring service that the smoke alarm and Control Panel will be undergoing maintenance.

General Alarm Test

A *general alarm test* verifies that the Piezo sounder and LED indicator operate properly. It also verifies that the Wireless Smoke & Heat Alarm’s transmitter sends the appropriate signal to the Control Panel.

To perform a general alarm test:

- 1 Press and hold the **Test/Hush** button for approximately six (6) seconds.
- 2 When the alarm goes into the triggered state, release the **Test/Hush** button.
 - The RED LED flashes every one (1) second.
 - The Piezo sounder will emit the Temporal 3 pattern.
 - The Control Panel will go into the alarm state.
 - The name of the programmed zone for the Wireless Smoke & Heat Alarm displays on the Control Panel’s screen.

Smoke Test

A *smoke test* ensures that an alarm is triggered when it detects smoke. When performing a smoke entry test, you can use a smoldering punk stick, cotton wick, or aerosol smoke.

WARNING: Testing the alarm using an open flame or vehicle exhaust voids your warranty and can be a deadly mistake that can cause permanent damage to the alarm, ignite combustible materials, and start a structure fire.

NOTE: Always use aerosol smoke in a well-ventilated environment. Over-exposure can irritate skin, eyes, mucus membranes, and result in adverse health effects. Refer to the manufacturer's instructions and your local authorities for proper safety, handling, and disposal information.

To perform a smoke test:

- 1 Direct the smoke or smoke aerosol towards the alarm's sensing chamber. When the alarm is triggered, the following occurs:
 - The RED LED flashes every one (1) second.
 - The Piezo sounder will emit a Temporal 3 pattern.
 - The Control Panel will go into the alarm state.
 - The name of the programmed zone for the Wireless Smoke & Heat Alarm displays on the Control Panel's screen.
- 2 Disarm the system to silence the Control Panel and acknowledge the alarm.

IMPORTANT: A smoke alarm can only be triggered when scattered light from smoke particles in the air is detected. For this reason, smoke alarms may not be able to detect fires that start in chimneys, on roofs, behind walls, on the other side of a closed door, or on a different floor of a dwelling unit.

Direct Heat Test

A *direct heat test* ensures that an alarm is triggered when the alarm detects a quick rate of rise condition (20°/minute).

To perform a direct heat test:

- 1 Hold a 1000-1500 watt hair dryer about 12 in (30.48 cm) from the alarm to avoid damaging the plastic.
- 2 Power the hair dryer ON. Then direct the heat toward the sensing chamber.
- 3 When the alarm goes into the triggered state:
 - The RED LED flashes every one (1) second.
 - The Piezo sounder will emit the Temporal 3 pattern.
 - The Control Panel will go into the alarm state.
 - The name of the programmed zone for the Wireless Smoke & Heat Alarm displays on the Control Panel's screen.
- 4 Once the alarm is triggered on the detector, it will reset only after the rate of rise condition clears.

NOTE: If the alarm fails any of the tests in this document, follow the instructions in "Cleaning the Alarm" on page 4.

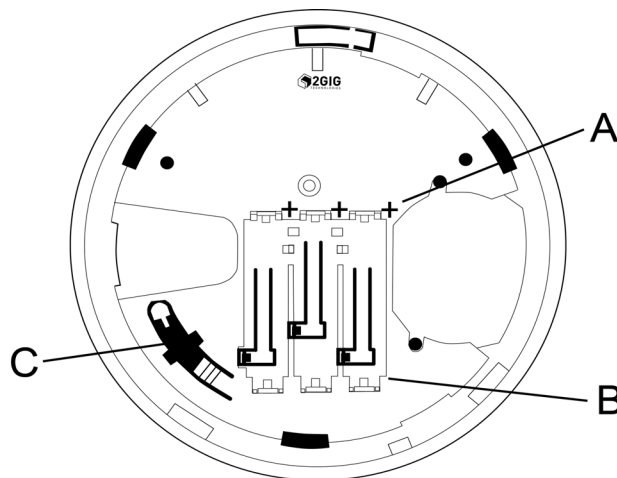
Inserting and Replacing the Batteries

To insert or replace the batteries:

- 1 Remove the backplate from the unit by twisting it approximately 15 degrees in a counter-clockwise direction.
- 2 Gently remove the batteries from the compartment. You may need to use a non-conductive tool to remove them.
- 3 Insert the replacement batteries. Always observe the polarity markings on the backplate when inserting the batteries.
- 4 Attach the alarm to the backplate by turning the smoke alarm in a clockwise direction until the alignment mark and arrow meet. See *Figure 4* on page 2.

When properly closed, the unit should snap firmly into place.

Figure 5 Wireless Smoke & Heat Alarm—Battery Compartment



- A Battery Compartment—Positive (+) Polarity Marking
 B Battery Compartment—Negative (-) Polarity Marking
 C Tamper Button

NOTE: Always dispose and/or recycle used batteries in accordance with the hazardous waste recovery and recycling regulations for your location. Your city, state, or country may also require you to comply with additional handling, recycling, and disposal requirements.

WARNING: Failure to follow these warnings and instructions can lead to heat generation, rupture, leakage, explosion, fire, or other injury, or damage. Do not insert the battery into the compartment in the wrong direction. Always replace the battery with the same or equivalent type (see "Specifications" on page 6). Never recharge or disassemble the battery. Never place the battery in fire or water. Always keep batteries away from small children. If batteries are swallowed, promptly see a doctor.

When to Replace the Batteries

When the batteries are low, the YELLOW LED flashes once every 12 seconds, and the Piezo sounder emits an audible chirp once every 48 seconds until the batteries are replaced. The chirps can be silenced for 12-hours by pressing the **Test/Hush** button. Battery life is a minimum of one (1) year, and varies depending on how often the unit is tested.

NOTE: Continuous exposure to high heat may reduce battery life.

Cleaning the Alarm

Clean the alarm at least once every year or when indicated by the alarm's *Trouble* status (see "*Mounting the Alarm*" on page 1).

To clean the alarm exterior:

- 1 Wipe the outside of the alarm with a damp cloth. To prevent water from damaging the alarm interior, never use a wet cloth.

To clean the alarm interior and sensing chamber:

- 1 Separate the alarm from its backplate by twisting the alarm counter-clockwise approximately 15 degrees.
- 2 Remove the alarm's batteries. See "*Inserting and Replacing the Batteries*" on page 3.
- 3 Use a soft-bristled brush to remove dust and dirt from the sensing chamber.
- 4 Use compressed air or vacuum cleaner hose to blow air through the openings in the sensing chamber.
- 5 Reattach the alarm to its backplate by turning the smoke alarm in a clockwise direction until the alignment mark and arrow meet. See *Figure 4* on page 2.

When properly closed, the unit should snap firmly into place.

Silencing the Alarm

To silence the alarm:

- 1 Press the **Test/Hush** button.
- 2 Clear the room of any smoke. If smoke is still present after a few minutes, the Piezo sounder and the Control Panel's alarm will resume.

Status Transmissions and LED Indicators

The table below summarizes the alarm's LED indicators, Piezo sounder, and radio signals that are transmitted to the Control Panel for each alarm status:

STATUS	LED INDICATORS			PIEZO SOUNDER	CONTROL PANEL RESPONSE
	RED	YELLOW	GREEN		
Normal	OFF	OFF	One (1) flash every 12 seconds	OFF	None (Normal)
Alarm (Smoke/Heat)	One (1) flash every second	OFF	OFF	Temporal 3*	Smoke alarm for a minimum of four (4) minutes
**General Alarm & Sensitivity Check Pass	One (1) flash every second	OFF	OFF	Two (2) Temporal 3 cycles	None (Normal)
Low Battery	OFF	One (1) flash every 12 seconds	OFF	One (1) chirp every 48 seconds	Low Battery
Tamper	RED, YELLOW, GREEN flash sequence every 12 seconds	RED, YELLOW, GREEN flash sequence every 12 seconds	RED, YELLOW, GREEN flash sequence every 12 seconds	OFF	Tamper
**Out of Sensitivity Range	OFF	One (1) flash every eight (8) seconds	OFF	One (1) chirp every 48 seconds	None (Normal)
**Internal Self-Check Fault	OFF	One (1) flash every four (4) seconds	OFF	One (1) chirp every 48 seconds	None (Normal)
Hush Button on Alarm	One (1) flash every second	OFF	OFF	Off for five (5)-10 minutes	Alarm
Hush Button on Low Battery	OFF	One (1) flash every 12 seconds	OFF	Off for 12 hours	Low Battery
Power-Up	RED, YELLOW, GREEN flash sequence every 8 seconds.	RED, YELLOW, GREEN flash sequence every 8 seconds.	RED, YELLOW, GREEN flash sequence every 8 seconds.	One (1) chirp after nine (9) seconds	None (Normal)

*ANSI S3.41 Temporal 3 refers to cycles of three (3) pulses: 0.5 second ON, 0.5 second OFF, followed by one (1) second OFF.

** Status indicators available on the Wireless Smoke & Heat Alarm, no indicators displayed on the Control Panel.

IMPORTANT INFORMATION

WARNING: READ THE FOLLOWING CAREFULLY:

- Fire-warning equipment for residential occupancies are capable of protecting about 50% of the occupants in potentially fatal fires. Victims include the elderly, children, and the physically or mentally impaired. Victims include any person that cannot escape even when warned early enough that escape should be possible. For these people, other strategies such as protection-in-place or assisted rescue or escape would be necessary.
- Studies show that Smoke/Heat Alarms may not awaken all sleeping individuals. It is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the audible alarm or those who may be incapable of safely evacuating the area unassisted.
- The use of alcohol or drugs may also impair one's ability to hear the audible alarm. For maximum protection, ensure that an audible alarm is installed on every floor of the home.
- Battery-powered smoke alarms require a battery of the specified type, in good condition, and installed properly.
- Smoke alarms only detect smoke when it enters the alarm's sensing chamber.
- Smoke alarms can help save lives by providing early warning of a fire.
- Smoke alarms are not a substitute for an insurance policy. Home owners and renters should always keep adequate insurance to protect their properties.
- Smoke alarms should be mounted on a ceiling or high on a wall.
- At a minimum, install at least one (1) of these smoke alarms on each level of a multi-story dwelling. The smoke alarm must be installed in accordance with all regulations defined by nation, state, and local fire safety authorities.

Where NOT to Install the Alarm:

- Do NOT install this smoke alarm in a location where the normal ambient temperature is below 40° F (4.4° C) or higher than 100° F (37.8° C).
- Do NOT install this smoke alarm directly above a sink, shower, or bathtub.
- Do NOT mount the alarm next to a door or window affected by drafts. For example, do NOT install near an extractor fan or air vent.
- Do NOT mount the alarm outside. The alarm is designed for indoor use only.
- Do NOT mount the alarm in or below a cupboard.
- Do NOT mount the alarm in a location where air flow is obstructed by curtains or furniture.
- Do NOT mount the alarm where dirt, dust, or grease can collect and block the sensor.
- Do NOT mount the alarm where it can be knocked, damaged, or inadvertently removed.
- Do NOT place this smoke alarm within five (5) ft (1.5 m) of a kitchen appliance, furnace, water heater, or other source of combustion to minimize nuisance alarms.

Safety Tips

- Develop a *Family Escape Plan* and discuss it with all occupants.
- Draw a map of the home showing all doors and windows.
- Identify at least two (2) ways out of every room (if possible) and practice using those ways out.
- Ensure that all outside doors open easily.
- Agree on an outdoor meeting place, such as a light pole, mailbox, or tree that is a safe distance from the dwelling.
- Teach children how to escape on their own in the event that no one is available to assist them.
- Always close doors behind you as you leave.
- Conduct a "fire drill" at least twice a year, and at both day and night. Ensure every occupant participates.

Family Escape Plan

The time between the detection of fire and the threat of fire becoming deadly can be a matter of seconds. Always plan and practice for rapidly deteriorating conditions, focus on a rapid exit, and hold fire drills so all dwellers are aware of the actions to take if the alarm sounds. When it sounds, always remember to:

- Get out and stay out. Never go back inside for people/pets.
- To escape through smoke: Get low and go under it.
- Call the fire department from outside your home.

For additional safety tips, consult your national, state, and local fire safety authorities.

SPECIFICATIONS

Detector Maximum Protection Area	70 ft (21.3 m)
Audible Signal (ANSI Temporal 3)	85 dBA min. in alarm
Sensitivity	1.26-2.38%/foot obscuration
Transmitter Frequency	433.92 MHz (crystal controlled)
Unique ID Codes	Over one (1) million different code combinations
Supervisory Interval	70 minutes
Max Current	50 mA
Alarm Current	20 mA
Supervisory Current	25 uA
Maximum Horizontal Sensing Angle	360° for ceiling mount or 180° for wall mount
Dimensions (D x H)	4.95 x 2.5 in (12.6 x 6.4 cm)
Weight (with battery & bracket)	8.57 oz (243 g)
Housing Material	ABS Plastic
Color	White
Operating Temperature	40°-100° F (4.4° - 37.8° C)
Relative Humidity	15-90% Non-Condensing
Batteries (installed)	Three (3) 1.5 V AAA Duracell MN2400 Batteries or equivalent
Certification	CE

REGULATORY INFORMATION



Conformité Européenne

Linear LLC hereby declares that this Wireless Smoke & Heat Alarm Model 2GIG-SMKT4-433 is in compliance with the essential requirements and other relevant provisions of the following directives:

Constructions Products (CPD) Council Directive 89/106/EEC,
Radio and Telecommunication Terminal Equipment (RTTE) Directive 1995/5/EC,
Electromagnetic Compatibility (EMC) Directive 2004/108/EC,
Low Voltage (LVD) Directive 2006/5/EC,
Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU,
W.E.E.E. Directive 2012/19/EU

Conformity was assessed using a Technical Construction File and testing to the following standards: EN 14604, EN 50130-4, EN 61000-6-3, EN 60950, EN 300-220-1, EN 300-220-2, EN 301-489-1, EN 301-489-3

A copy of the European Union CE marking "Declaration of Conformity" may be obtained from: www.linearcorp.com/cedoc



This symbol on the product or on its packaging indicates that this product is not to be thrown away with everyday waste.

Instead, it is your responsibility to dispose of electrical and electronics equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment (W.E.E.E.). The separate collection and recycling of your waste electrical and electronic equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, or your household waste disposal service, or the shop where you purchased the product.

LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for two (2) years. This warranty extends only to wholesale customers who buy direct from Linear LLC or through Linear LLC's normal distribution channels. Linear LLC does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any.

There are no obligations or liabilities on the part of Linear LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation. All implied warranties for functionality, are valid only until the warranty expires. This Linear LLC Warranty is in lieu of all other warranties expressed or implied.

2GIG by Linear

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Contact your regional distributor
Visit dealer.2gig.com for a list of distributors in your region

77-000022-001 Rev. A