

# FREEZER SENTRY

CLOUD CLAIM .eve

# User Manual

\_\_\_\_\_

www.Level-Sense.com



# **TABLE OF CONTENTS**

Section 1:	About Freezer Sentry	.02
Section 2:	Specifications	02
Section 3:	Requirements	03
Section 4:	In the box	.03
Section 5:	Account Creation	04
Section 6:	Status LEDs	06
Section 7:	Installation	07
Section 8:	Connect to Wi-Fi	10
Section 9:	Claim Device	13
Section 10:	Contact Information	.13
Section 11:	Notification Settings	14
Section 12:	Viewing Data	16
Section 13:	Wi-Fi Password Reset	16
Section 14:	Service Disclaimer	
Section 15:	Warranty	17





# **SECTION 1: ABOUT FREEZER SENTRY**

Freezer Sentry is a Wi-Fi based refrigerator/freezer monitor. Freezer sentry monitors three critical elements of your freezer as alarm inputs:

- Temperature
- · Humidity
- Power Loss/Wi-Fi Status
- · Optional Sensor Inputs for Leak Sensor & Float Switch

Each of the above-mentioned alarm inputs can be configured individually as alarm triggers based on their state. There are three alarm outputs of the Freezer Sentry

- SMS (Text Message)
- E-Mail
- · Audible Siren

# **SECTION 2: SPECIFICATIONS**

#### Level Sense Freezer Sentry Specifications

Accuracy of Temp Sensor	+/- 0.2C
Accuracy of Humidity Sensor	+/- 2%
Temp/Hum Rec. Operating Cond.	-20C to 125C
Power Supply	12VDC
Siren	90 dB
Head Unit Size	87x21x50mm
Head Unit Max Operating Temp	100F





- · 120/240 VAC (50 or 60 Hz) Power Outlet
- · 2.4 Ghz Wi-Fi internet within range of Freezer Sentry
- · Wi-Fi enabled device with Web browsing
- · Flat head screwdriver #3 or #4 (if optional leak or float sensors are used)

# **SECTION 4: IN THE BOX**

- 1. Head Unit
- 2. Temp/Hum Sensor
- 3. Zip Ties
- 4. Various Mounting Hardware
- 5. Instruction Sheet





# **SECTION 5: ACCOUNT CREATION**

#### 1. Level Sense Account Creation:

Thank you for your Level Sense Freezer Sentry purchase. The first step in getting your Freezer Sentry device online is to create your Level Sense Account. This can be done with either a computer, or a smartphone/tablet.

If you prefer video instructions over written, please scan the QR code. This video will walk you through sections 5 and 8–11.



#### a. Smartphone/Tablet

a. On your smartphone proceed to either the iOS app store, or the Android Play store

b. Type into the search bar "Level Sense", and download the application





#### FREEZER SENTRY USER MANUAL

c. Next click on the register button and enter in your personal information into the register page, and lastly click the create button. Congratulations, your Level Sense account has been created.

The Username and Password that are used for your account are the same for both the mobile application and the website.

9.36	.el) 85%
<	Register
First name	
First name	
Last name	
Lastname	
Email address	
Password	
Passent	
	CREATE
HA	VE AN ACCOUNT? LOGIN
Once success can use the s the Level-Sen	Ally registered, Please topin. You yme E-mail and Password to login to se.com Website.

#### b. Computer:

- a. Begin by opening an internet browser like Google Chrome or Safari.
- b. In the address bar type in: Level-Sense.com
  - i. Click on the text labeled "Account"



05



 Next enter in your First name, Last name, email address, and password. Click the submit button and your Level Sense account has successfully been created.

Login ( New Portal Users )	Portal Register ( New & Legacy Portal User )
Email	
	First Name
Password	9
Sign In	Last Name
Forgot Password	
	Email
	Password
	(6) (10) (6) (10) (6) (10) (6) (10) (6) (10) (6) (10) (10) (10) (10) (10) (10) (10) (10
	Create

# **SECTION 6: STATUS LEDS**

The status LEDs on the Freezer Sentry provides a visual indication of the state of the Freezer Sentry. The below table is a system status guide. PLEASE NOTE that if the four LEDs are flashing in unison, then this is a CLAIM CODE. If you have a claim code, reference Section 9.

Device State	Power	Cloud	Temp	Alarm
No Alarm(s)	Blue	Blue		Blue
Access Point (Waiting for Wireless Connection)		Pulsing White		
Wi-Fi Connection in Progress		Yellow		
Loss of Wi-Fi Signal		Red		
Temperature Above Upper Setpoint			Red*	
Temperature in Setpoint			Green*	
Temperature Below Lower Setpoint			Blue*	
Alarm Present				Red
Firmware Upgrade / Server Maintenance		Purple		

\*As the temperature moves towards the upper set point, the Temp LED will transition towards true RED. As the temperature moves towards the midpoint between the upper and lower set point, the Temp LED will become true GREEN in color. Lastly, as the temperature moves towards the lower setpoint, the Temp LED will transition towards true BLUE.

06





# **SECTION 7: INSTALLATION**

#### 1. Head Unit Installation:

- a. The head Unit can be mounted in one of three ways.
  - Magnetically: Magnets are mounted inside of the Freezer Sentry enclosure. Place the back of the enclosure onto the side of the refrigerator/freezer, and the head unit will stay in place thanks to the magnets.



ii. Wall Mount: The template shown below can be used to mount the device directly to a wall via the mounting screws.

WALL MOUNT TEMPLATE (TO SCALE)





Cable tie Mount: The two sticky pad anchors and zip ties can be used to mount the head unit.



#### 2. Temperature Sensor Install:

a. If not already done, the temperature sensor can be inserted gently into the Level Sense (LS) Freezer Sentry head unit as shown below. Follow the labels on the printed circuit board which will assist with inserting the sensor. There is a Green LED that will light up on both ends of the temperature sensor when the board is inserted correctly, and when power is applied.





b. The Temperature sensor can be installed in the refigerator/freezer one of three ways.

i. 1. The integrated hook can be used to mount the sensor on a wire rack as shown on a standard freezer, or on a deep freeze.



 The snap lock adhesive support can be inserted into the hole on the hook sensor. Remove the covering for the adhesive and firmly push the snap lock support onto the refrigerator/freezer wall.





iii. To mount with the included screw, insert the screw into the hole on the hook sensor, and carefully tighten the screw to the printed circuit board.



# **SECTION 8: CONNECT TO WI-FI**

The Freezer Sentry device is immediately ready to join your 2.4 Ghz Wi-Fi network after power up. When the Freezer Sentry has not been configured to a Wi-Fi network the Cloud LED will display as WHITE, and the access point is active (the unit will broadcast its Level Sense Wireless Network. Refer to section 6).

There are a series of articles on more advanced troubleshooting for WI-FI connections under the Troubleshoot section which is found on the upper banner of the website.

#### Password Requirements for Your Local 2.4Ghz Wi-Fi Network:

SSID (Local Network Name) and Password are Case Sensitive You must have a password 8 - 48 Characters in Length. The following Characters are not supported in Wi-Fi Passwords or network names at the moment: <> \ ^ ' { } |" %

#### THIS APPLIES TO CONNECTING WITH WPS OR CONNECTING WITH HOTSPOT!

FREEZER SENTRY USER MANUAL



#### 1. Hotspot Method:

- a. To connect your Freezer Sentry to your Wi-Fi network via the hotspot mode, you will need a Wi-Fi enabled device like a smartphone or laptop. The Cloud LED of the Freezer Sentry should be white which indicates the device is broadcasting a Wi-Fi hotspot. Use your Wi-Fi device (phone, tablet, or computer) to connect to the Level Sense network (the last four digits of the Level Sense network is the last 4 digits of the device's MAC address). Your phone may indicate that this network has no internet connection. This is normal.
- b. Once connected to the Level Sense network, a Wi-Fi configuration page will automatically appear. If this page does not appear automatically, then open a web browser and enter the device's IP address into the address bar: 192.168.4.1
- c. On the webpage, you will select the bubble of YOUR HOME 2.4 Ghz Wi-Fi network. Next you will enter the PASSWORD of YOUR HOME network. Note that this field is case sensitive.

In this step v	we are connecting your	Level Sence Sentry Device to your Le	cal Wireless Network	
WiFi Con	figuration			
Please sele ype the Net	ct your current wireless twork Name. This is the	network. If you are using a Non-Broa network the Level SENTRY will joint:	dcasting network, please s	elect Manual and
		SSID	RSSI	Channel
OY	our Wi-Fi Network		-61	1
assword (0	Case Senstive):	fiven.	fiven	
assword (0	Case Senstive):	tiven.	fiven	



- d. Once complete, you can enter your Level Sense account email address into the email address field (If you do this, the device will automatically link to your account, and you will NOT be presented with a claim code). Lastly, press the submit button.
- e. The webpage then instructs you to click the RESET button on the Freezer Sentry. After restarting, the Cloud LED will pulse yellow until it connects to your Wi-Fi. Upon successful connection the device will either...
  - i. Present a claim code (all four LEDS on the device will blink in unison (Proceed to Section 9)
  - The Cloud LED will change to pulsing blue, followed by blue on the other 3 LEDs (*Proceed to Section 10*). This indicates that the device has been successfully linked to your account, and no claim code is needed.
  - iii. The Cloud LED changes to red (No local internet connection). This can be caused by an incorrect password for the Wi-Fi network, or the network is out of range. If this happens, press the RESET button to try again. If it does not connect on subsequent attempts, please reference Section 13 for instructions on how to perform a password reset.





# **SECTION 9: CLAIM DEVICE**

If you typed in your E-Mail address on the Wi-Fi configuration page (as seen in the previous Section), then your device will be claimed automatically, and it will be in your account upon login in the portal (if you do not see the device, refresh your screen). If you did not enter your E-Mail address on the Wi-Fi configuration page, it will be necessary to claim the device. Once the Freezer Sentry is connected to your wireless network, the Freezer Sentry will flash all four LEDs in unison. This is a claim code. After logging into the portal via the website or the mobile application click on the "Claim" button. Follow the directions on screen and enter the unique claim code.

### **SECTION 10: CONTACT INFORMATION**

Once you are logged into your account on the Level Sense website, or in the mobile application, click on the "Contacts" tab or if you are using the mobile application click the "Notification" tab. Click on the plus button next to the default contact and enter your phone number, cell phone service provider, etc. Do not forget to enable both email and text options. It is a good idea to <u>TEST</u> both the email and text feature currently as well. Lastly, you must save and submit the contact.



# **SECTION 11: NOTIFICATION SETTINGS**

This section will guide you on how to enable and disable sensor inputs to suit your application. On the website, you can edit the notification settings by clicking on the bell icon, which is underneath the "Alarm Settings" column. If you are on the mobile application, you will need to click on the device name, and then an action bar will show up at the bottom of the screen, click on the bell icon.

- The first input is for the Temperature Sensor. The left side of the screen has the lower set point, and the right side is the upper set point. Any temperature below the lower setpoint will put the device into alarm state. Also, a temperature above the upper setpoint will put the device into alarm state. A reading that is in between the upper and lower setpoint will not cause an alarm.
  - a. Delay of Temperature Alarms: This is the time for the delay of a Temperature alarm. From the time that the temperature reading is out of range, the device will not go into alarm state until the delay time is met. We recommend using a delay of 5 minutes for this sensor. If you do not use a delay, then you will get an alarm immediately if the temperature goes out of range. You may get temperature alarms when the refrigerator/freezer are opened. This is most likely not useful for most people.
  - b. Temperature Offset: The Offset feature is used to calibrate your temperature sensor. In the first text box enter the number that you want to adjust the temperature by. For example, if your current temperature reading from the Freezer Sentry device is 34F, and the actual temperature in the freezer is 32F, then you will enter 2.00 into the first text box and select the minus sign into the operation text box to adjust the temperature reading to the correct temperature value. Please note that it can take up to five minutes for the offset value to take effect. Refresh your screen and refer to the Offset Equation above to verify if the offset is applied as intended.



- 2. The second input listed is the humidity sensor. The left side of the screen has the lower set point, and the right side is the upper set point. A humidity reading below the lower setpoint will put the device into alarm state. A humidity reading above the upper setpoint will also put the device into alarm state. Note that the humidity sensor does not have an offset function.
- The third and fourth inputs on the screen are for a float and leak sensor. Freezer Sentry does not come with these sensors, but they can be added at any time. A leak sensor is an especially good idea as you can monitor your refrigerator/ freezer for leaks.

Lastly, you can enable and disable email, text, and the siren feature for any of the inputs by clicking on the text bubble. Do not forget to click the submit button if you have made any changes on this screen.

Alarms can be temporarily disabled by pressing the silence button on the Freezer Sentry. If an alarm cannot be quickly resolved, it will be necessary to disable the siren checkbox for the given sensor in the portal or application.

Alarm Cor	nfiguration
Temperatu	re: 6.01 'F
-27.4 °F 🕥	37.4 °F 💮
Delay of Temperature Alarms:	15 Minutes 🗇 🗸
Temperature Offest: 100 ⑦	Operation: • 🗇 🗸
O SREN O	IMAL O TEXT
Relative Hur	nidity: 52.9%
1.00 🕐	98.00
Delay of Temperature Alarms:	15 Minutes 🗇 🗸
O SREN O	EMAIL O TEXT
Leak Sensor () STATUS Open	() Alarm When Closed (Sefault)
O SHEN O	EMAL O TEXT
Float Switch ⑦ STATUS Open	(7) Alarm When Closed (default) (7)
O SIREN O	EMAR, O TEXT



FREEZER SENTRY USER MANUAL

# **SECTION 12: VIEWING DATA**

Once you are logged into your account, click on the view charts button on the website. If you are using the mobile application, first click on the device name, and then click the graph icon under the "Action Items" tab at the bottom of your screen.



# SECTION 13: WI-FI PASSWORD RESET

To clear the Wi-Fi credentials from the Freezer Sentry, complete the following steps:

- · Press and hold the SILENCE button until all four LEDs appear as RED.
- Let go of the SILENCE button, and then click the SILENEC button two times, two LEDS will remain lit.
- Wait until the two remaining red LEDs go out, and then press the RESET button. The password reset is complete. Proceed to Section 8 for guidance on how to get your device back online.
- · The Cloud LED should be white following the password reset steps.







# **SECTION 14: SERVICE DISCLAIMER**

Level Sense includes a minimum cloud monitoring service ("Portal") period of one year from the date of manufacture. Continued service may be offered monthly or annually for a fee or gratis. Level Sense reserves the right to alter, amend or change information, services, and pricing at any time. Level Sense also reserves the right to modify or discontinue services at any time after the first year.

# **SECTION 15: WARRANTY**

2 year limited warranty

Please read this warranty carefully before using the product.

This limited warranty contains the standard terms and conditions ("toc") of level sense. Where permitted by the applicable law, by keeping your level sense product beyond thirty (30) days after the date of delivery, you fully accept the terms and conditions set forth in this limited warranty.

In addition, where permitted by the applicable law, your installation and/or use of the product constitutes full acceptance of the terms and conditions of this limited warranty (hereinafter referred to as "limited warranty or warranty"). If you do not agree to the terms and conditions of this warranty, including any limitations of warranty, indemnification terms or limitation of liability, then you should not use the product and should return it to the seller for a refund of the purchase price. The law may vary by jurisdiction as to the applicability of your installation or use actually constituting acceptance of the terms and conditions herein and as to the applicability of any limitation of warranty, indemnification terms or limitations of liability.



- Warrantor: in this warranty, warrantor shall mean "dealer, distributor, and/or manufacturer."
- Elements of warranty: this product is warranted to be free from defects in materials and craftsmanship with only the limitations and exclusions set out below.
- Warranty and remedy: two-year warranty in the event that the product does not conform to this warranty at any time during the time of two year from original purchase, warrantor will repair the defect and return it to you at no charge.

This warranty shall terminate and be of no further effect at the time the product is: (1) damaged by external causes such as fire, water, lightning, etc. Or not maintained as reasonable and necessary; or (2) modified; or (3) improperly installed; or (4) misused; or (5) repaired or serviced by someone other than warrantors' authorized personnel or someone expressly authorized by warrantors to make such service or repairs; (6) used in a manner or purpose for which the product was not intended; or (7) sold by original purchaser.

Limited warranty, limitation of damages and disclaimer of liability for damages: the warrantor's obligation under this warranty is limited to repair or replacement of the product, at the warrantor's option as to repair or replacement. In no event shall warrantors be liable or responsible for payment of any incidental, consequential, special and/or punitive damages of any kind, including but not limited to any labor costs, product costs, lost revenue, business interruption losses, lost profits, loss of business, loss of data or information, or financial loss, for claims of any nature, including but not limited to claims in contract, breach of warranty or tort, and whether or not caused by warrantors' negligence. In the event that it is determined in any adjudication that the limited warranties of repair or replacement are inapplicable, then the purchaser's sole remedy shall be payment to the purchaser of the original cost of the product, and in no event shall warrantors be liable or responsible for payment of any incidental, consequential, special and/or punitive damages of any kind, including but not limited to any lost revenue, business



interruption losses, lost profits, loss of business, loss of data or information, or financial loss, for claims of any nature, including but not limited to claims in contract, breach of warranty or tort, and whether or not caused by warrantors' negligence.

Without waiving any provision in this limited warranty, if a circumstance arises where warrantors are found to be liable for any loss or damage arising out of mistakes, negligence, omissions, interruptions, delays, errors or defects in warrantors' products or services, such liability shall not exceed the total amount paid by the customer for warrantors' product and services or \$150.00, whichever is greater. You hereby release warrantors from any and all obligations, liabilities and claims in excess of this limitation.

Indemnification and covenant not to sue: you will indemnify, defend and hold harmless warrantors, their owners, directors, officers, employees, agents, suppliers or affiliated companies, against any and all claims, demands or actions based upon any losses, liabilities, damages or costs, including but not limited to damages that are direct or indirect, incidental, special or consequential, and including attorney's fees and legal costs, that may result from the installation, operation, use of, or inability to use warrantors' products and services, or from the failure of the warrantors' system to report a given event or condition, whether or not caused by warrantors' negligence.

You agree to release, waive, discharge and covenant not to sue warrantors, their owners, directors, officers, employees, agents, suppliers or affiliated companies, for any and all liabilities potentially arising from any claim, demand or action based upon any losses, liabilities, damages or costs, including but not limited to damages that are direct or indirect, incidental, special or consequential, and including attorney's fees and legal costs, that may result from the installation, operation, use of, or inability to use warrantors' products and services, or from the failure of the warrantors' system to report a given event or condition, whether or not caused by warrantors in egligence, except as necessary to enforce the express terms of this limited warranty.



Exclusive warranty: the limited warranty or warranties described herein constitute the sole warranty or warranties to the purchaser. All implied warranties are expressly disclaimed, including: the warranty of merchantability and the warranty of fitness for a particular use and the warranty of fitness for a particular purpose and the warranty of non-infringement and/or any warranty arising from a course of dealing, usage, or trade practice.

It must be clear that the warrantors are not ensuring your premises or business or guaranteeing that there will not be damage to your person or property or business if you use this product. You should maintain insurance coverage sufficient to provide compensation for any loss, damage, or expense that may arise in connection with the use of products or services, even if caused by warrantors' negligence. The warrantors assume no liability for installation of the product and/or interruptions of the service due to strikes, riots, floods, fire, and/or any cause beyond seller's control, further subject to the limitations expressed in any license agreement or other agreement provided by warrantors to purchaser.

The agreement between the warrantors and the purchaser, including but not limited to the terms and conditions herein shall not be governed by the convention for the international sale of goods. Where applicable, the uniform commercial code as adopted by the state of Delaware shall apply.

- 4. Procedure for obtaining performance of warranty: in the event that the product does not conform to this warranty, the product should be shipped or delivered freight prepaid to a warrantor with evidence of original purchase.
- 5. Legal remedies and disclaimer: some jurisdictions may not allow, or may place limits upon, the exclusion and/or limitation of implied warranties, incidental damages and/or consequential damages for some types of goods or products sold to consumers and/or the use of indemnification terms. Thus, the exclusions, indemnification terms and limitations set out above may not apply, or may be limited in their applicable law permits limiting the duration of implied warranties, then the implied warranties herein are to be limited to the



same duration as the applicable written warranty or warranties herein. The warranty or warranties herein may give you specific legal rights that will depend upon the applicable law. You may also have other legal rights depending upon the law in your jurisdiction.

6. Choice of forum and choice of law: In the event that a dispute arises out of or in connection with this limited warranty, then any claims or suits of any kind concerning such disputes shall only and exclusively be brought in either the eastern district court of Missouri or the United States district court for the eastern district of Missouri.

Regardless of the place of contracting or performance, this limited warranty and all questions relating to its validity, interpretation, performance and enforcement shall be governed by and construed in accordance with the laws of the state of Missouri, without regard to the principles of conflicts of law.

# **Conse Conse FREEZER SENTRY**

Effective date 06/08/2022 Sump Alarm, Inc. d.b.a. Level Sense Phone: 314-787-8059 www.Level-Sense.com