

IN THE UNITED STATES DISTRICT COURT  
FOR DISTRICT OF DELAWARE

SMART LOCKING TECHNOLOGIES LLC )  
 )  
 Plaintiff, )  
 ) Civil Action No. 1:19-cv-992-LPS  
 v. )  
 ) **JURY TRIAL DEMANDED**  
 IGLOOHOME INC. )  
 )  
 Defendant. )  
 \_\_\_\_\_ )

**AMENDED COMPLAINT**

For its Complaint, Plaintiff Smart Locking Technologies LLC ("Smart Locking Technologies"), by and through the undersigned counsel, alleges as follows:

**THE PARTIES**

1. Smart Locking Technologies is a Delaware limited liability company with a place of business located at 3511 Silverside Road, Suite 105, Wilmington, Delaware 19810.
2. Defendant Igloohome Inc. is a Delaware company, with, upon information and belief, a place of business located at 2200 Benjamin Franklin Parkway, Philadelphia, Pennsylvania 19130.

**JURISDICTION AND VENUE**

3. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*
4. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.
5. Upon information and belief, Defendant conducts substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals

in this district.

6. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b).

**THE PATENTS-IN-SUIT**

7. On February 24, 2014, U.S. Patent No. 6,696,918 (the "'918 patent"), entitled "Locking Mechanism for Use with Non-Permanent Access Code," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '918 patent is attached hereto as Exhibit A.

8. On October 9, 2001, U.S. Patent No. 6,300,873 (the "'873 patent"), entitled "Locking Mechanism for Use with One-Time Access Code," was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '873 patent is attached hereto as Exhibit B.

9. The '918 patent is a continuation-in-part of the '873 patent and shares substantially the same specification.

10. The claims of the '918 and '873 patents ("patents-in-suit"), including the asserted claims, when viewed as a whole, including as ordered combinations, are not merely the recitation of well-understood, routine, or conventional technologies or components. The claimed inventions were not well-known, routine, or conventional at the time of the invention, over approximately twenty years ago, and represent specific improvements over the prior art and prior existing systems and methods.

11. At the time of the patented inventions, known methods of using a code to access a secured door, secured access point, and/or secured container were less than secure.

12. As explained in the patents-in-suit, there were several drawbacks with then existing security technologies that used codes to access secured areas or containers.

13. For example,

U.S. Pat. No. 5,774,053, which is hereby incorporated by reference, describes a storage device for the delivery and pickup of goods. As recognized in that disclosure, home delivery of goods has become more and more popular with the rise of shopping over the Internet, by catalog, and so on. In addition to clothing, appliances, furniture, books and other materials previously available from catalogs and the like, the Internet has spawned e-shopping services for groceries and other items. Similarly, in many areas local merchants such as dry cleaners offer residential pickup and delivery services for their customers.

The storage device described in U.S. Pat. No. 5,774,053 provided a means for such home pickups and deliveries even when the homeowner was absent. Briefly, the storage device provided a secure environment for the goods and included a communication apparatus for providing notification that the goods had been picked up or delivered. Access to the storage device was gained by entering a so-called vendor code into a controller via a keypad. The controller oversees locking/unlocking of the storage device. Entering a valid vendor code unlocks the storage device, allowing couriers and/or others to pickup and/or deliver goods from/to the storage device.

One shortcoming with the storage device described by U.S. Pat. No. 5,774,053 concerns the use of the vendor codes. As contemplated, the vendor codes are static, reusable codes assigned to each vendor that delivers and/or picks up goods to/from the storage device. "For example, a laundry and drycleaning (sic) business may be assigned a vendor code of 333, whereas a local grocery store may be assigned a vendor code of 444." U.S. Pat. No. 5,774,053 at col. 5, ll. 39-45. The use of such vendor codes presents a security risk in that once an unauthorized person learns one of the codes, that individual has access to the storage device until such time as the code is removed from the list of authorized vendor codes stored in the controller's memory. This presents a problem inasmuch as several days or weeks may pass before a storage box owners learns that one or more of the vendor codes has been compromised and has time to reprogram the controller with new vendor codes. During this time, the security of the storage box is questionable at best. Moreover, the assigning, canceling and reassigning of the vendor codes requires what could be a significant amount of time and effort (key management) on the part of a storage device owner/end-user. Also, the vendors are required to keep track of codes for different customers and, presumably, must take steps to ensure that the security of these codes are maintained.

'918 patent at 1:23-2:4; '873 patent at 1:23-2:3.

14. Among other things, the inventors of the patents-in-suit wanted to increase security of locking devices by preventing compromised codes from being used to gain unauthorized access. Indeed, as explained in the specification, quoted above, "several days or

weeks may pass before a storage box owners learns that one or more of the vendor codes has been compromised and has time to reprogram the controller with new vendor codes. During this time, the security of the storage box is questionable at best." '918 patent at 1:60-64; '873 patent at 1:59-64. There was thus a need to improve the security of locking devices, and existing technology did not permit one-time use codes or keys to unlock locking devices.

15. The asserted claims of the patents-in-suit are directed to specific improvements in electronic security device functionality and capabilities. Among other things, the asserted claimed inventions improve functionality of locking devices and methods, systems and networks comprising those devices. Including as noted in the patents-in-suit, the claimed technologies comprise innovative systems and processes that provide increased security over those existing at the time and result in a better user experience. The patents-in-suit thus provide concrete applications that improved locking devices and networking, including for issuing to a person needing to unlock a locking device a non-permanent or one-time use access code issued by a remote server.

16. Additionally, the inventions of the asserted claims of the patents-in-suit comprise improvements in the security of locking devices, including that a unique one-time access code to allow access to a locking mechanism associated with a secured door, secured access point, and/or secured container is issued by a server for each access, pickup or delivery, thus reducing opportunities for theft and/or tampering and providing for the tracking of each access.

17. The claimed inventions provide and achieve improved network and security functionality and efficiency with remote locking devices by allowing one time access and non-permanent codes to be received by an access code entry unit that can be automatically generated without the need of expensive hosting of key information or third parties maintaining the use,

accuracy and tracking of the codes. The inventors did more than simply apply current technology to an existing problem. Their invention, as embodied in the asserted claims, was a significant advancement in remote locking technology. The inventions covered by the asserted claims comprise use of wireless networks or the Internet that includes a remote server to form a system that allows for the automatic issuance of unlock codes that are one-time and/or non-permanent, which is known today as "smart locking technology." The claimed inventions encompass such smart locking/unlocking products as those accused in the present action and other actions filed by Smart Locking Technologies, which were described in a 2018 industry analysis, well after the patents-in-suit were filed, as "a novel technology introduced and commercialized in recent past." Smart Lock Market Size, Share, Analysis, Industry Report (May 2018) (available at <https://www.securitysales.com/research/smart-door-locks-sales-2021/>).

18. Accordingly, the patents-in-suit describe "a scheme for providing locking mechanisms (that may be used in a variety of applications) for use with one-time access codes." '918 patent at 2:7-9; '873 patent at 2:6-8. The use of one-time access avoids several drawbacks known in prior art systems and provides increased security in situations where unlock codes need to be provided remotely to an access code entry unit. "[B]ecause the access codes are intended for one-time use only, vendors and others are freed from the responsibility of maintaining the security of a number of keys for different customers for indefinite periods. Keys (or access codes) may be distributed to the locking mechanism in a variety of ways (including via a RF network and/or at the time of manufacture)." '918 patent at 2:15-21; '873 patent at 2:14-21.

19. Further, as explained in the patents-in-suit:

In a further embodiment, a storage device that includes an enclosure adapted to allow for the storage of goods and having a door fitted with a locking mechanism; and a locking mechanism controller coupled to the locking mechanism and adapted to unlock the locking mechanism upon receipt of an entry code . . . is

provided. . . . The locking mechanism controller preferably includes a micro-controller configured to operate an actuator in response to receiving the entry code and may be adapted to receive the entry code via at least one of a keypad, a bar code scanner, a magnetic stripe reader, a wireless (e.g., RF or IR receiver) or a smart card reader. In some cases, the locking mechanism controller may be configured to communicate with a server (e.g., via at least one of the Internet, a wireless network or the public switched telephone network) configured to provide the entry code.

'918 patent at 2:39-67; '873 patent at 2:39-61.

20. "In one embodiment, the present system allows for the secure delivery and/or pickup of goods, thereby increasing the efficiency of courier personnel by providing means for unattended pickup/delivery. In addition, means for verifying such delivery/pickup are incorporated within the system. One embodiment of the present system is composed of storage devices (adapted to be placed at locations where pickup/delivery services are desired, e.g., residences, office buildings, condominium and/or apartment developments, etc.), one or more computer servers, communications devices, human interface components and software. Features of the system include package tracking, electronic signatures, payment transfer, delivery scheduling, unattended transfer/storage of parcels and event notification to multiple parties. In addition, the present system allows for confirmation of deliveries/access to the storage device as well as confirmation of acceptance of the items delivered. As will be more fully described below, a unique one-time access code to allow access to a locking mechanism associated with a storage device is issued by a server for each access, pickup or delivery, thus reducing opportunities for theft and/or tampering and providing for the tracking of each access." '918 patent at 3:66-4:21; '873 patent at 3:46-67.

21. "The one-time access codes may be provided through the use of code books that are personalized for each locking device. For example, at the time each locking device (or its access code entry unit) is manufactured, a number of access codes may be stored in memory in a

particular sequence. For example, the access codes may be stored in a table, similar to that shown in FIG. 4. Each access code may be N-digits long (e.g., 4-10 digits and in one embodiment 5-7 digits) and up to P (e.g., 1024-2048 or more) such access codes may be stored in a table 50 resident in memory (see below for a more detailed discussion of the access controller). These codes may be generated by a cryptographically strong random (e.g., pseudo-random) number (using a unique seed number for each individual locking device) generator at the time of manufacture and a replica of the access code table 50 for each locking device may be maintained at server 30 (e.g., as part of a customer database and/or a key database). Each time a delivery service, merchant and/or other person/entity requests an access code for a particular locking device, an unused code from the table for that locking device is selected and provided to the requester (preferably only after authenticating the identity of the requestor through the use of a previously assigned pass-code or the like)." '873 patent at 7:42-65; *see also* '918 patent at 8:19-42.

22. These noted improvements over the prior art represent meaningful limitations and/or inventive concepts based upon the state of the art approximately twenty years ago. Further, including in view of these specific improvements, the inventions of the asserted claims, when such claims are viewed as a whole and in ordered combination, are not routine, well-understood, conventional, generic, existing, commonly used, well known, previously known, typical, and the like over approximately twenty years ago, including because, until the inventions of the asserted claims of the patents-in-suit, the claimed inventions were not existing or even considered in the field.

23. The asserted claims, including as a whole and where applicable in ordered combination, comprise, *inter alia*, a non-conventional and non-generic arrangement of

communications between locking mechanism and a one-time electronic access code that is delivered remotely over a network to access control device that is a technical improvement to the communications between the devices and provides increased security, including those improvements noted above.

24. The claimed inventions are necessarily rooted in computer technology, i.e., remote security access device technology using one-time access codes, and comprise improvement over prior technologies in order to overcome the problems, including those noted above, specifically arising in the realm of computer networks. The claimed solutions amount to an inventive concept for resolving the particular problems and inefficiencies noted above, including in connection with accessing secured areas and/or containers remotely using a computing device to receive a one-time access code.

25. Smart Locking Technologies is the assignee and owner of the right, title and interest in and to the '918 and '873 patents, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

**COUNT I – INFRINGEMENT OF U.S. PATENT NO. 6,696,918**

26. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 25 as if fully set forth herein.

27. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant is liable for infringement of at least claim 32 of the '918 patent by making, using, importing, offering for sale, and/or selling locking devices and systems and methods therefor, including, but not limited to, Deadbolt 2S ("Smart Deadbolt"), because each and every element is met either literally or equivalently.



28. Upon information and belief, Defendant used the Smart Deadbolt via its internal use and testing in the United States, directly infringing one or more claims of the '918 patent.

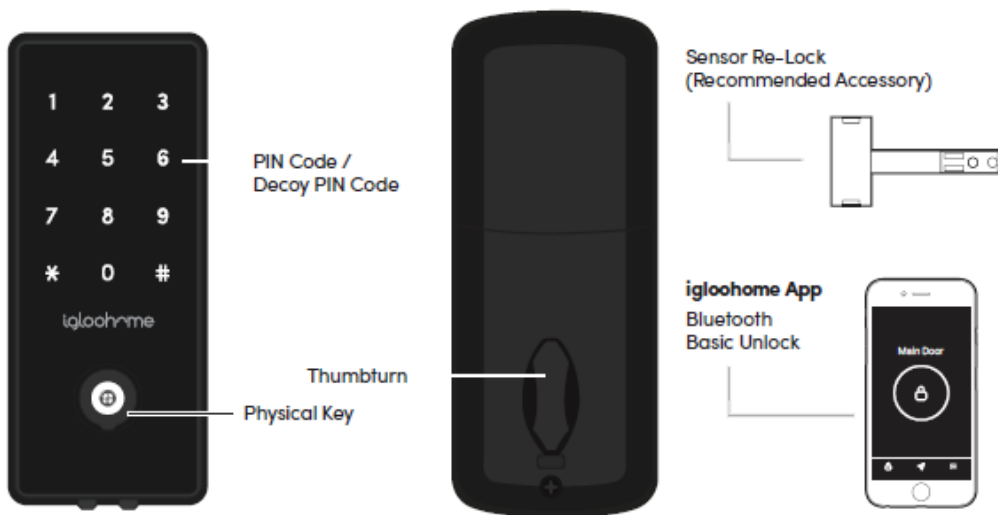
29. For example, to create its video "igloohome Smart Deadbolt || Official Video" (available at <https://youtu.be/Kwuxk7XPrEM>), Defendant used the Smart Deadbolt.

30. More specifically, Smart Deadbolt is a locking mechanism.



<https://www.igloohome.co/products/deadbolt-2s/>.

# Unlocking & Locking



**Unlocking**

<p> <b>PIN Code</b> Key in your PIN code and press '#'</p> <p> <b>Bluetooth Basic Unlock</b> On your app, click on the Bluetooth Unlock button and tap on your lock</p> <p> <b>Thumbturn</b> Use thumbturn at the back of lock</p>	<p> <b>Bluetooth Guest Key</b> Refer to page 23</p> <p> <b>Physical Key</b> Use the physical key to unlock the door</p>
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**Locking**

<p> <b>'#' Key</b> Press and hold '#'</p> <p> <b>Timer Re-Lock</b> Refer to page 24</p> <p> <b>Sensor Re-Lock (Recommended Accessory)</b> Automatic locking after door closes</p>	<p> <b>Physical Key</b> Use the physical key to lock the door</p> <p> <b>Thumbturn</b> Use thumbturn at the back of lock</p>
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Installers & User Guide Deadbolt 2S. ("Manual") at p. 21 (available at [https://drive.google.com/file/d/1NiqJzXed81ysuluOAhHWuMnEDt0yg4af/view?\\_ga=2.87073560.1621303424.1558419509-1177689229.1557826393](https://drive.google.com/file/d/1NiqJzXed81ysuluOAhHWuMnEDt0yg4af/view?_ga=2.87073560.1621303424.1558419509-1177689229.1557826393)).

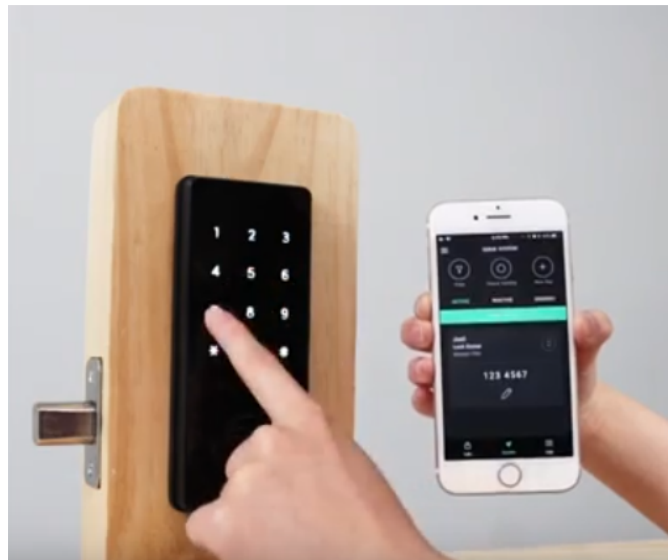
31. Smart Deadbolt includes an actuator configured to unlock in response to entry of an authorized access code.

To unlock your door with a PIN, simply touch your palm over the keypad of the lock to wake it up. Key in your PIN code, followed by '#'.

Each lock comes with a Master PIN which can be changed on the app (between 7-9 digits).

You can also generate and manage PIN codes with your igloohome mobile app.

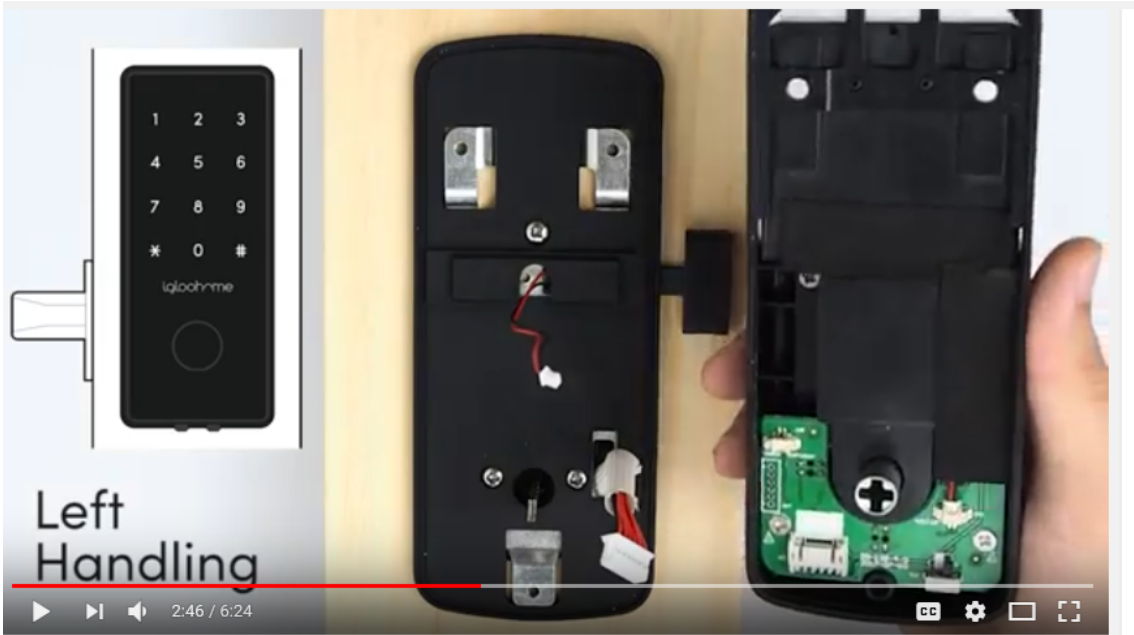
<https://igloohome.freshdesk.com/support/solutions/articles/35000013952-how-does-pin-code-unlock-work->



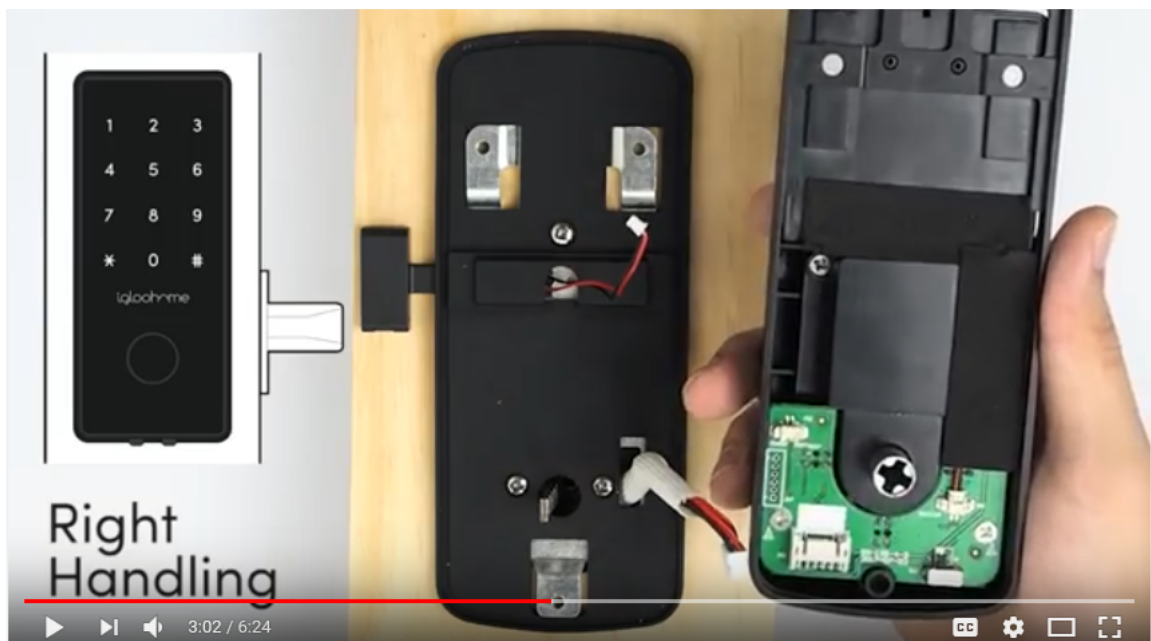
<https://youtu.be/FIQnhkTUpms?t=30>.



<https://youtu.be/FIQnhkTUpms?t=31>.



[https://youtu.be/PHZkBdq3\\_WY?t=166](https://youtu.be/PHZkBdq3_WY?t=166).

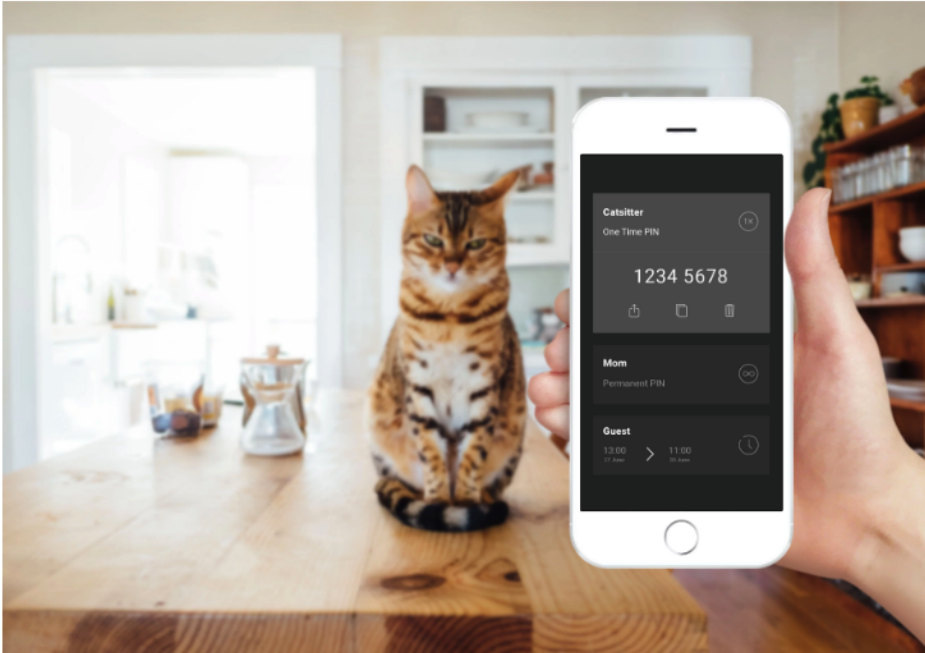


[https://youtu.be/PHZkBdq3\\_WY?t=182](https://youtu.be/PHZkBdq3_WY?t=182).

32. Smart Deadbolt includes an access code entry unit configured to accept a non-permanent use access code issued by a remote server.



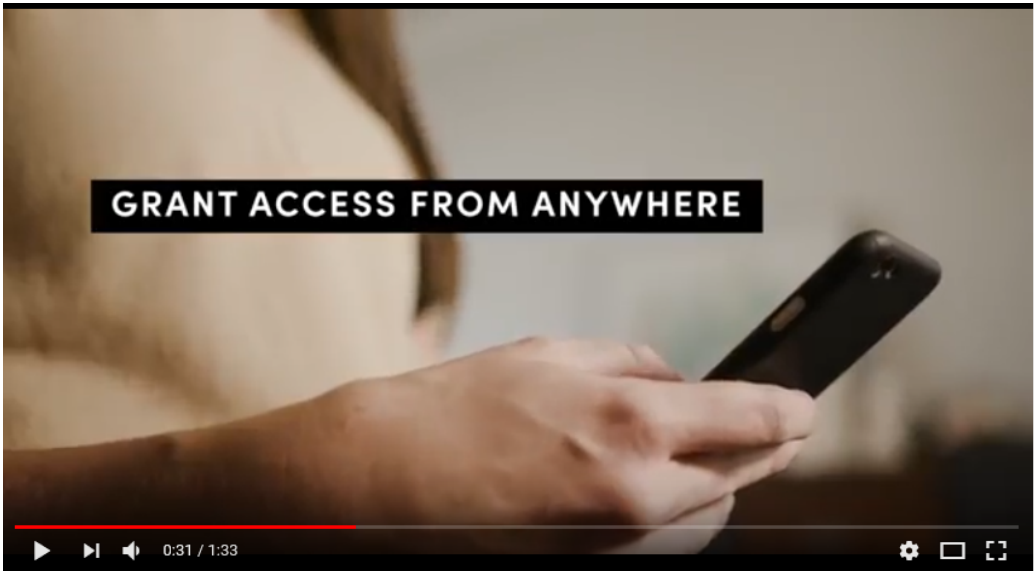
<https://www.igloohome.co/products/deadbolt-2s/>.



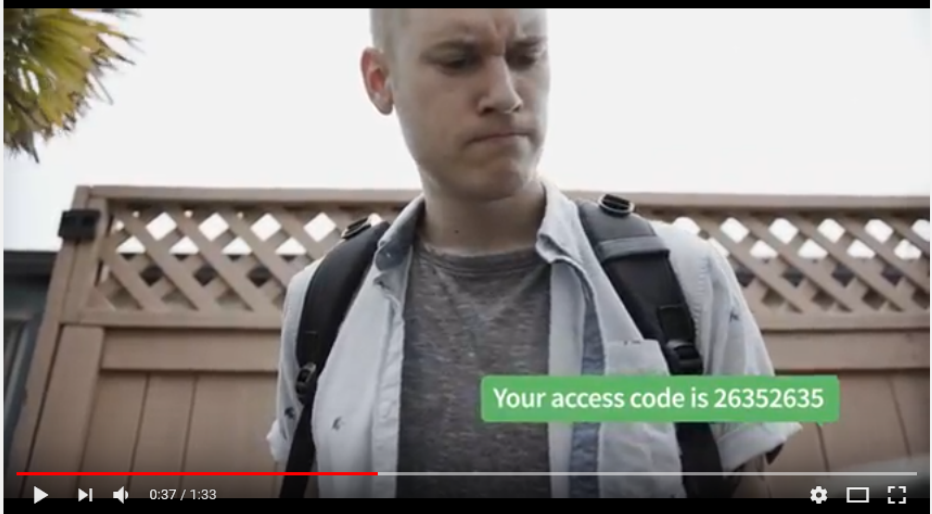
**Grant access to your home even when you're away.**

With the igloohome mobile app, create PIN codes or bluetooth keys, and select how long you want them to be valid for. Send them to your visitors from the app.

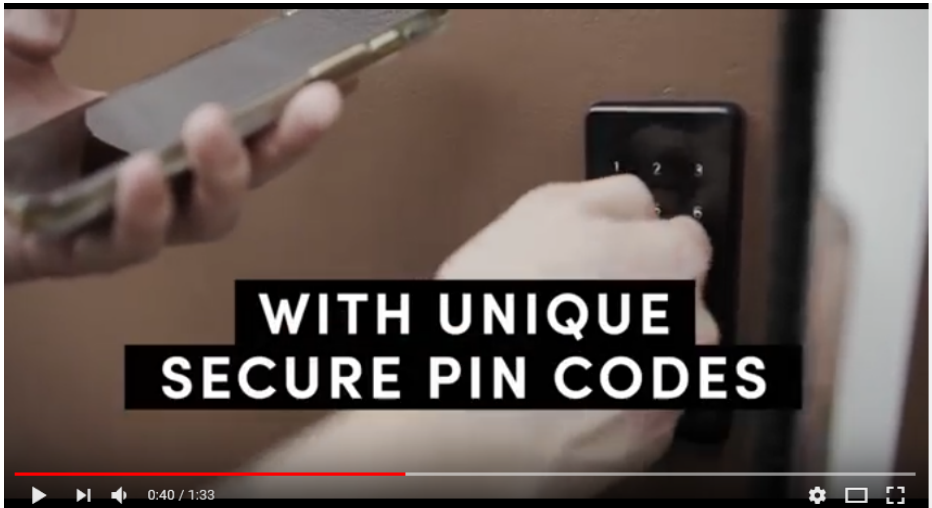
[https://www.igloohome.co/products/deadbolt-2s/?\\_ga=2.138503479.520391978.1555300236-562153576.1554518717.](https://www.igloohome.co/products/deadbolt-2s/?_ga=2.138503479.520391978.1555300236-562153576.1554518717)



[https://youtu.be/Kwuxk7XPrEM?t=31.](https://youtu.be/Kwuxk7XPrEM?t=31)



<https://youtu.be/Kwuxk7XPrEM?t=37>.



<https://youtu.be/Kwuxk7XPrEM?t=40>.



<https://youtu.be/Kwuxk7XPrEM?t=46>.

## I am a guest. How do I unlock the door?



Modified on: Thu, 7 Feb, 2019 at 4:16 PM

If you are a guest, your host would have provided you with one of the following methods of entry:

### **PIN code**

- The PIN code is a series of numbers that you can key into the igloohome smart lock.
- After keying in your PIN, press the # key to unlock (Key icon for Latch Model).
- Depending on the type of PIN code your host has given you, it may expire.

### **Bluetooth Unlock**

- Open the igloohome app and login
- Go to Visits under the Menu, and you will be able to view your Bluetooth Key(s).
- Click on the Bluetooth Key icon to unlock.
- Make sure that you have a strong Bluetooth and Internet connection on your phone.

<https://igloohome.freshdesk.com/support/solutions/articles/35000013987-i-am-a-guest-how-do-i-unlock-the-door->



# Managing Access in App

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## 1 Creating PIN codes

PIN codes can be generated on the app under **[Access]**, create **[New Key]** and choose either One-Time, Permanent or Duration PIN.

Pin codes will expire if its not use within its activation period. Refer to the table below.

PIN Type	Use PIN within*
One-Time PIN	6 hrs of generation
Permanent PIN	24hrs of generation
Duration PIN	24hrs from the start time

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## 2 Bluetooth Guest Key

Bluetooth Guest Key can be shared with other users for mobile access. It allows your guests to unlock the igloohome smart lock via Bluetooth.

There are 3 steps to using a Shared Bluetooth Key

- Under **[Access]**, create **[New Key]** and choose **[Bluetooth Key]** under **[Access Type]**. Proceed to share the key after it is created.
- Guest receives the Bluetooth Key by one of these methods:
  - Clicking the URL given and follow the instructions.
  - Scanning the QR code under **[Visits]**.
- Guest can now use the Bluetooth Key under **[Visits]** whenever he is within range of the lock.

Notes:

- The owner can revoke the Bluetooth Key in App.
  - Bluetooth Key must be accepted within 1 hour generation before it expires.
- 

## 3 Resetting PIN codes

Ensure that Bluetooth is switched on, and you are within Bluetooth range of the lock.

Go to Home > Select Lock Name > **[Settings]** > Reset Pins

Lock will reset all codes, except for Master PIN, and all PIN codes previously generated are no longer valid.

23

Manual at p. 23.

## Can I create temporary PIN codes?



Modified on: Wed, 1 Nov, 2017 at 5:21 PM

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Yes, they can be generated remotely via the igloohome app as long as there is internet connection on your phone.

<https://igloohome.freshdesk.com/support/solutions/articles/35000013956-can-i-create-temporary-pin-codes->.

## What types of access codes can I set?



Modified on: Thu, 7 Feb, 2019 at 5:32 PM

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You can create PIN and Bluetooth keys for friends, family or other visitors.

The igloohome app allows you to generate 3 types of PIN codes and bluetooth keys:

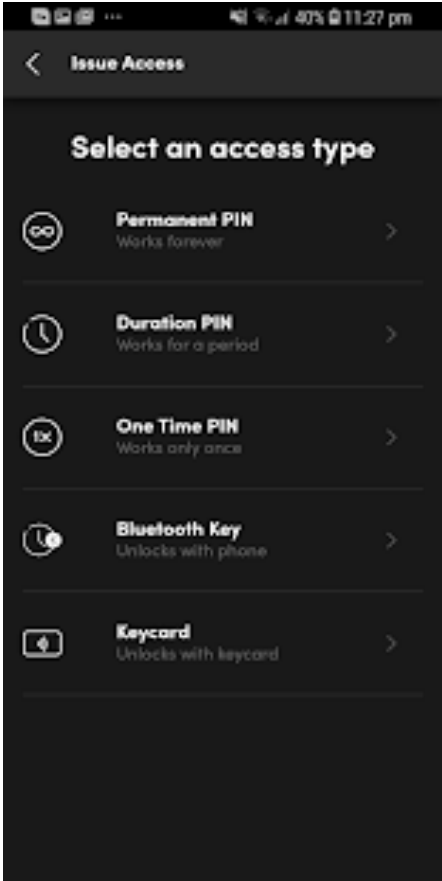
**One-Time PINs** must be used within 6 hours after creation

**Permanent PINs** must be used within 24 hours after creation

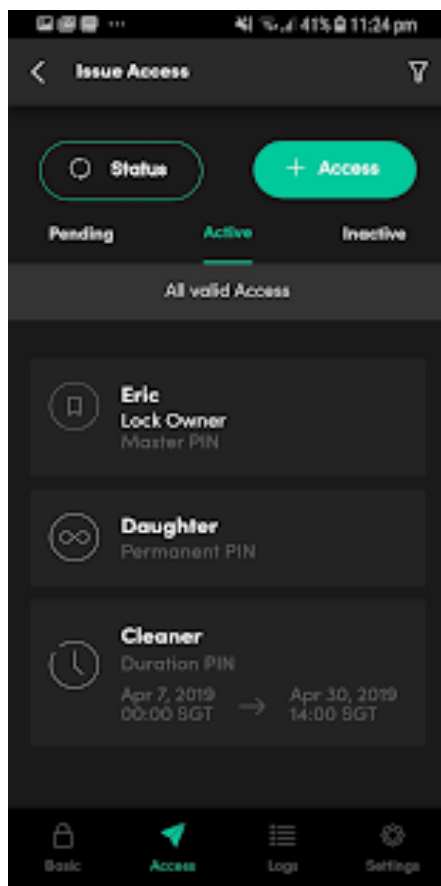
**Duration PINs** must be used within 24 hours of start time

**Bluetooth keys** must be used within one hour after creation

<https://igloohome.freshdesk.com/support/solutions/articles/35000013989-what-types-of-access-codes-can-i-set->.



<https://play.google.com/store/apps/details?id=com.igloo.home&hl=en>.



*Id.*

The igloohome app allows users to manage their igloohome smart locks or igloohome smart keyboxes. Grant visitors access to your home or property from any time and place. Through the igloohome app, you can send a PIN code or Bluetooth key to anyone via email/SMS/Whatsapp/other communication platforms, for the duration that you select. Through the igloohome mobile app, you can also check the access logs to see who and when someone has entered your property.

*Id.*

## Access at your fingertips

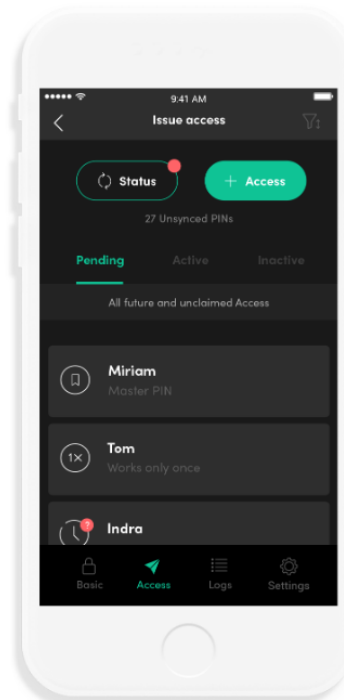
All igloohome devices work with the igloohome mobile app. You can manage access to your property anytime, anywhere.

### Grant access anytime, anywhere.

Via the mobile app, you can send PIN codes and Bluetooth keys from wherever you are. Our unique AlgoCode technology makes this possible, so you don't have to be near the Deadbolt to grant access to those who need it.

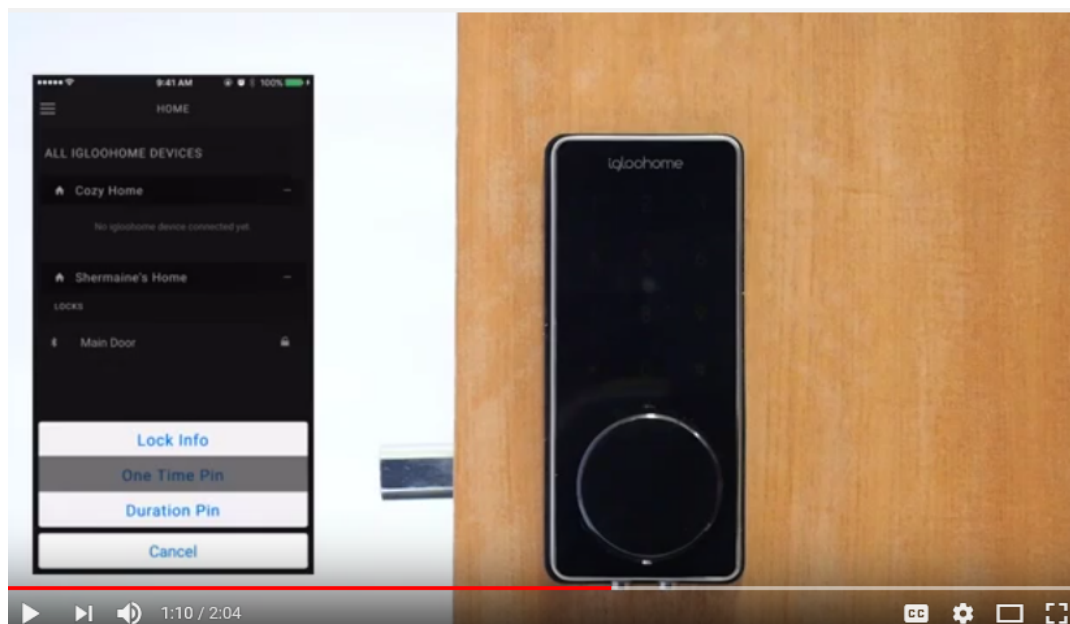
### Greater peace of mind.

Unlike conventional locks, the igloohome mobile app allows you to track dates and times of which visitors enter your home. Activity logs provides greater visibility for a greater peace of mind.

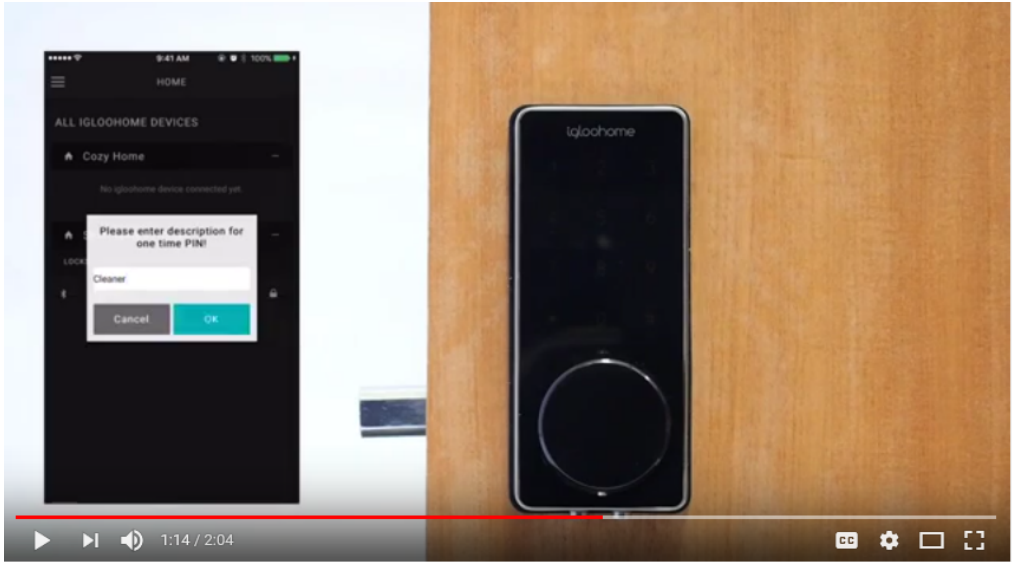


<https://www.igloohome.co/deadbolt-2s>.

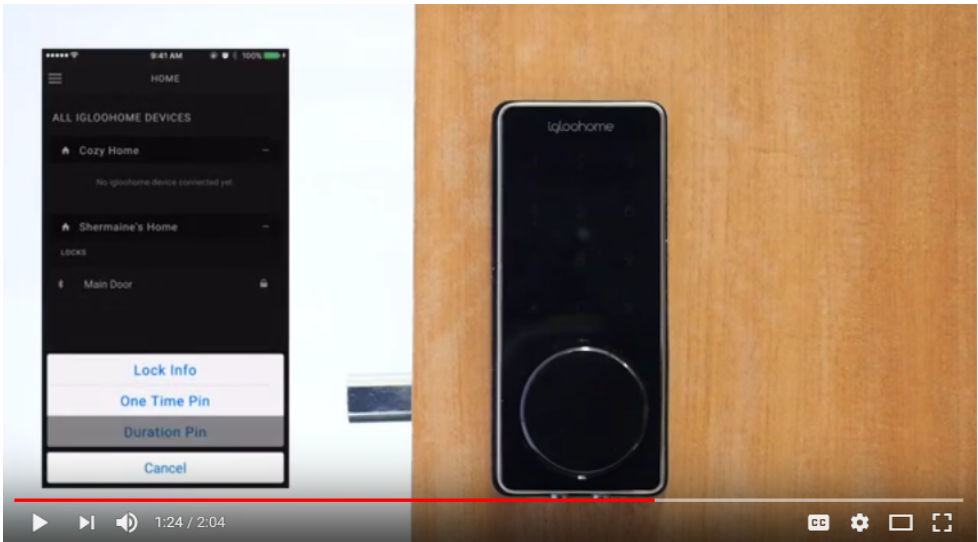
33. The access code includes identification information to indicate who accessed the locking mechanism.



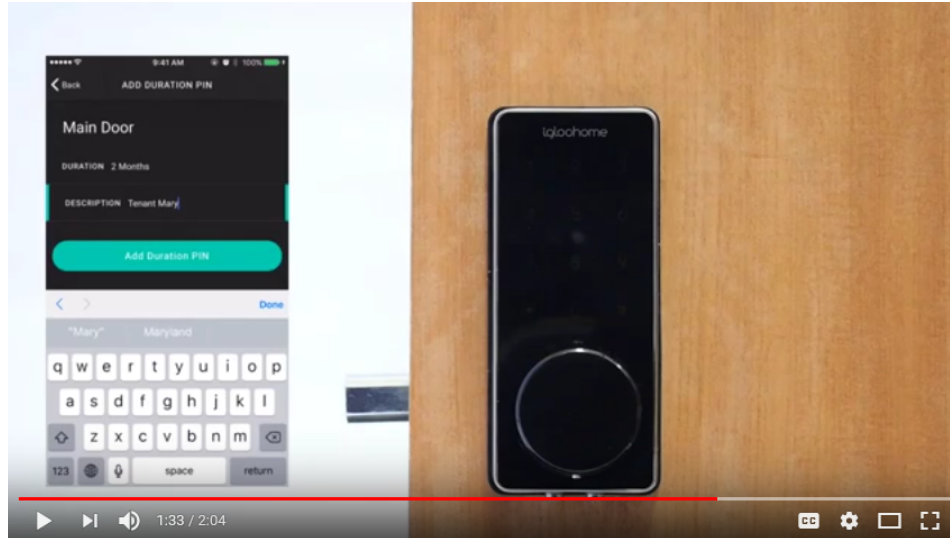
<https://youtu.be/o0ec9foAPyY?t=70>.



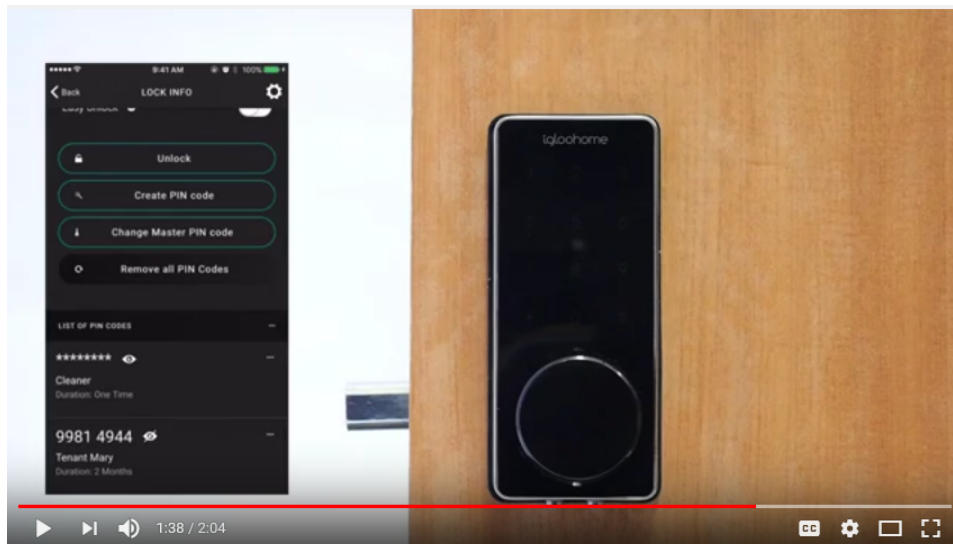
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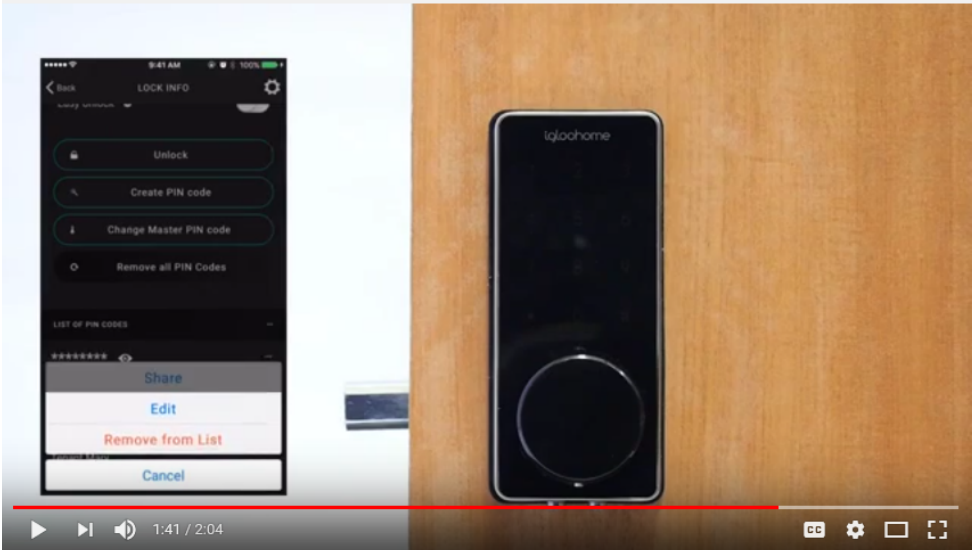
<https://youtu.be/o0ec9foAPyY?t=84>.



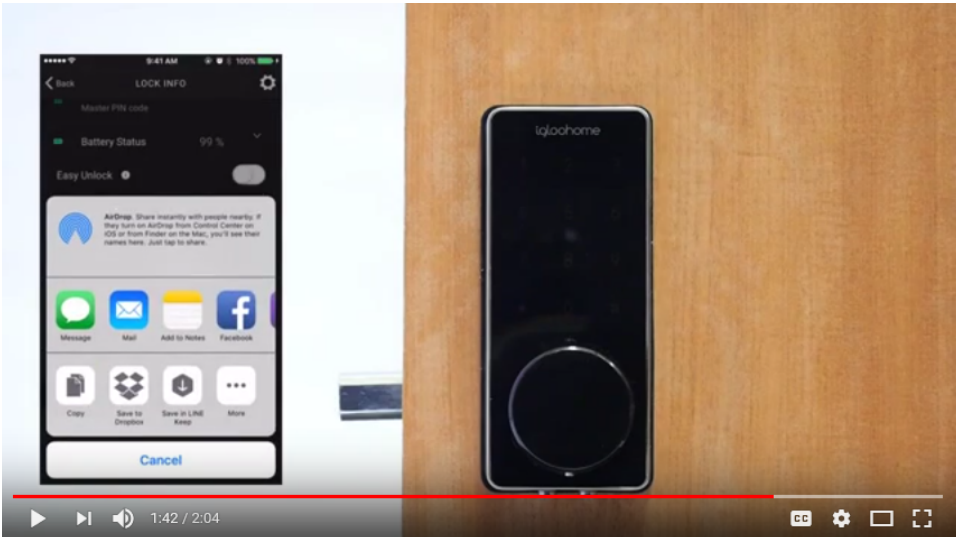
<https://youtu.be/o0ec9foAPyY?t=93>.



<https://youtu.be/o0ec9foAPyY?t=98>.



<https://youtu.be/o0ec9foAPyY?t=101>.



<https://youtu.be/o0ec9foAPyY?t=102>.





### View Access Logs

Track the dates and times at which visitors enter your home. Greater visibility on access brings you greater peace of mind. Bluetooth key access logs are updated in real time, and PIN code access logs are updated when the master owner uses a bluetooth key.

[https://www.igloohome.co/products/deadbolt-2s/?\\_ga=2.138503479.520391978.1555300236-562153576.1554518717](https://www.igloohome.co/products/deadbolt-2s/?_ga=2.138503479.520391978.1555300236-562153576.1554518717).

**Greater peace of mind.**

Unlike conventional locks, the igloohome mobile app allows you to track dates and times at which visitors enter your home. Activity logs provides greater visibility for a greater peace of mind.

**Safeguard your home**

Choose from One-Time, duration or permanent PIN codes. Time-sensitive access ensures that your home will always be kept safe. You can also view activity logs to see who, when and how the Deadbolt was unlocked.

\*PIN code logs are updated when the master owner unlocks the Padlock via a Bluetooth key. Bluetooth access are updated in real-time.

<https://www.igloohome.co/deadbolt-2s>.

34. Smart Deadbolt includes a locking mechanism controller programmed to transmit a message to a server and/or user indicating a non-permanent use access code has been accepted.

### Will I be notified if someone enter my house/property?

Modified on: Thu, 28 Jun, 2018 at 11:10 AM



Yes. You could monitor activities of your lock via the Access logs.

To access your activity logs,

1. Go to '**Home**'
2. Click on your Deadbolt 2S
3. Click on the '**Logs**' to access the activity log. (Bottom right corner of the page).

Activities will be updated in real time when guests uses a Bluetooth key for access and owners will immediately receive notifications whenever a Bluetooth Key is used.

Pin-code entries, however, will only be updated when master uses the Bluetooth Key on the lock.

<https://igloohome.freshdesk.com/support/solutions/articles/35000079551-will-i-be-notified-if-someone-enter-my-house-property->

### Are there igloohome app push notifications when someone enters my house/property?

Modified on: Thu, 28 Jun, 2018 at 12:57 PM



In-app notifications are available for any Bluetooth Key activities. These **will be sent in real time** when guests uses a Bluetooth key for access. Owners will immediately receive notifications whenever a Bluetooth Key is used.

However, Pin-code and key card entries will only be updated when the owner uses the Bluetooth Key on the lock.

You can monitor activities of your lock via the Access logs. Go to **Lock Info > Activity log** (tap on the icon at the top right hand corner of the page)

**Note:** Key card access logs are only available for the Mortise lock.

<https://igloohome.freshdesk.com/support/solutions/articles/35000014130-are-there-igloohome-app-push-notifications-when-someone-enters-my-house-property->

## Can I monitor the entry activities of my guests?



Modified on: Thu, 7 Jun, 2018 at 4:47 PM

This depends on the entry modes of your guests.

1. Bluetooth keys: Owners will be notified whenever guest uses a Bluetooth key to unlock the lock.
2. Pin-codes: Pin-code entries will not send notification to owner whenever it is used. Owners can only view the updated logs when someone uses the Bluetooth Keys to unlock.

<https://igloohome.freshdesk.com/support/solutions/articles/35000079559-can-i-monitor-the-entry-activities-of-my-guests->

The igloohome app allows users to manage their igloohome smart locks or igloohome smart keyboxes. Grant visitors access to your home or property from any time and place. Through the igloohome app, you can send a PIN code or Bluetooth key to anyone via email/SMS/Whatsapp/other communication platforms, for the duration that you select. Through the igloohome mobile app, you can also check the access logs to see who and when someone has entered your property.

<https://play.google.com/store/apps/details?id=com.igloo.home&hl=en>.

35. Smart Locking Technologies is entitled to recover from Defendant the damages sustained by Smart Locking Technologies as a result of Defendant's infringement of the '918 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284

### **COUNT II – INFRINGEMENT OF U.S. PATENT NO. 6,300,873**

36. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 35 as if fully set forth herein.

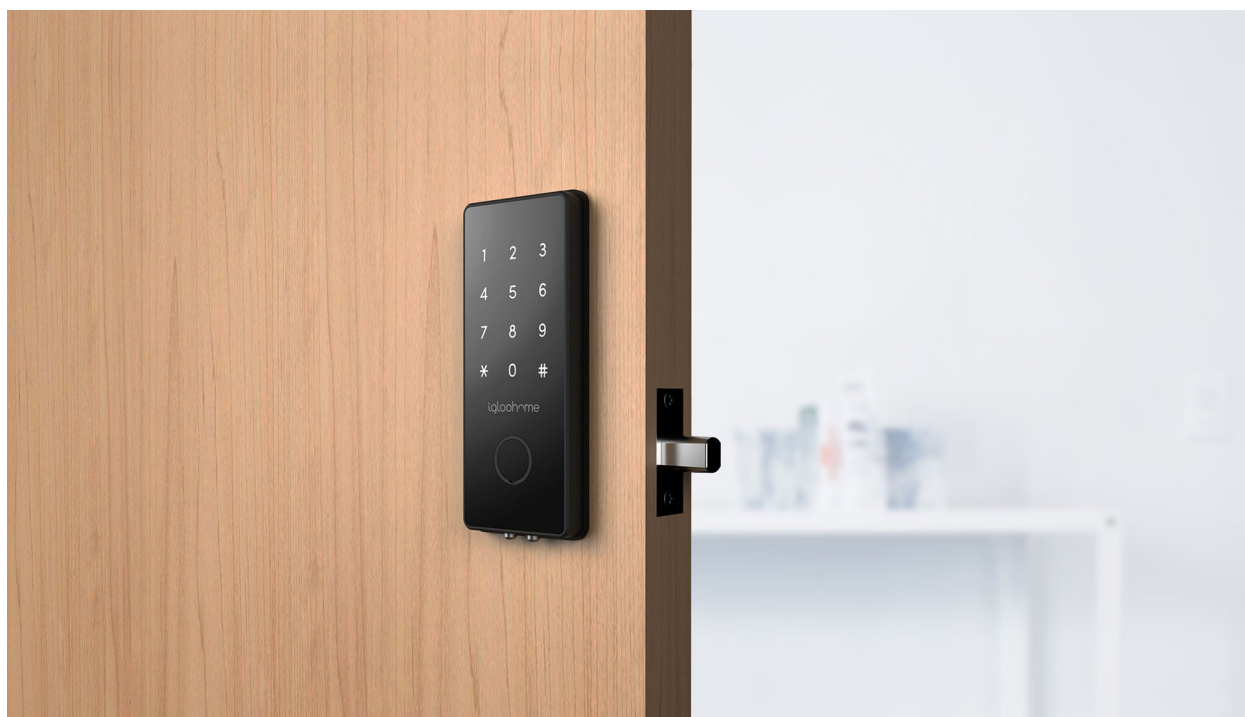
37. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendant is liable for infringement of at least claim 36 of the '873 patent by making, using, importing, offering for sale, and/or selling locking mechanisms and systems and methods therefor ,

including, but not limited to, Deadbolt 2S ("Smart Deadbolt"), because each and every element is met either literally or equivalently.

38. Upon information and belief, Defendant used the Smart Deadbolt via its internal use and testing in the United States, directly infringing one or more claims of the '873 patent.

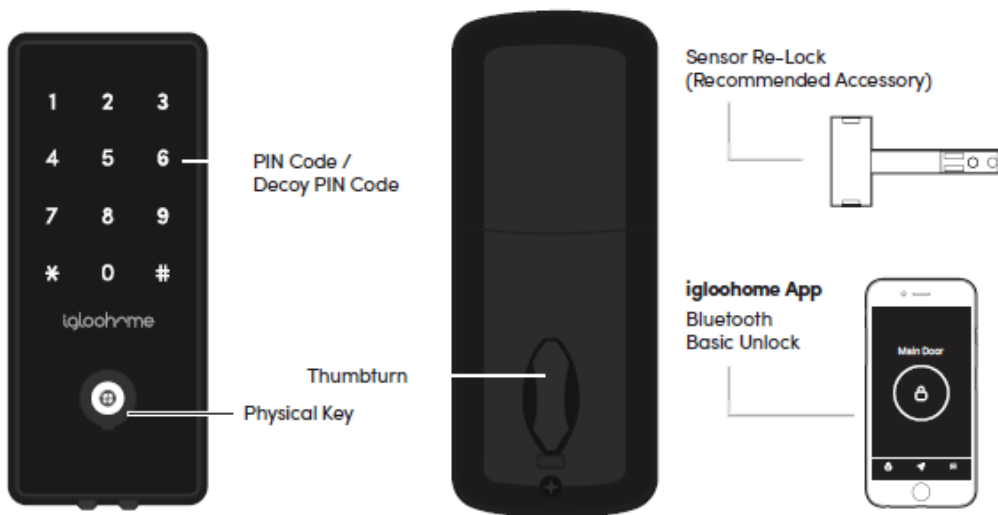
39. For example, to create its video "igloohome Smart Deadbolt || Official Video" (available at <https://youtu.be/Kwuxk7XPrEM>), Defendant used the Smart Deadbolt.

40. More specifically and upon information and belief, Smart Deadbolt is a locking mechanism.








<https://www.igloohome.co/products/deadbolt-2s/>.






# Unlocking & Locking



**Unlocking**

-  **PIN Code**  
Key in your PIN code and press '#'
-  **Bluetooth Basic Unlock**  
On your app, click on the Bluetooth Unlock button and tap on your lock
-  **Thumbturn**  
Use thumbturn at the back of lock
-  **Bluetooth Guest Key**  
Refer to page 23
-  **Physical Key**  
Use the physical key to unlock the door

**Locking**

-  **'#' Key**  
Press and hold '#'
-  **Timer Re-Lock**  
Refer to page 24
-  **Sensor Re-Lock (Recommended Accessory)**  
Automatic locking after door closes
-  **Physical Key**  
Use the physical key to lock the door
-  **Thumbturn**  
Use thumbturn at the back of lock

Manual at p. 21.

41. Smart Deadbolt includes an actuator configured to unlock in response to entry of an authorized access code.

To unlock your door with a PIN, simply touch your palm over the keypad of the lock to wake it up. Key in your PIN code, followed by '#'.

Each lock comes with a Master PIN which can be changed on the app (between 7-9 digits).

You can also generate and manage PIN codes with your igloohome mobile app.

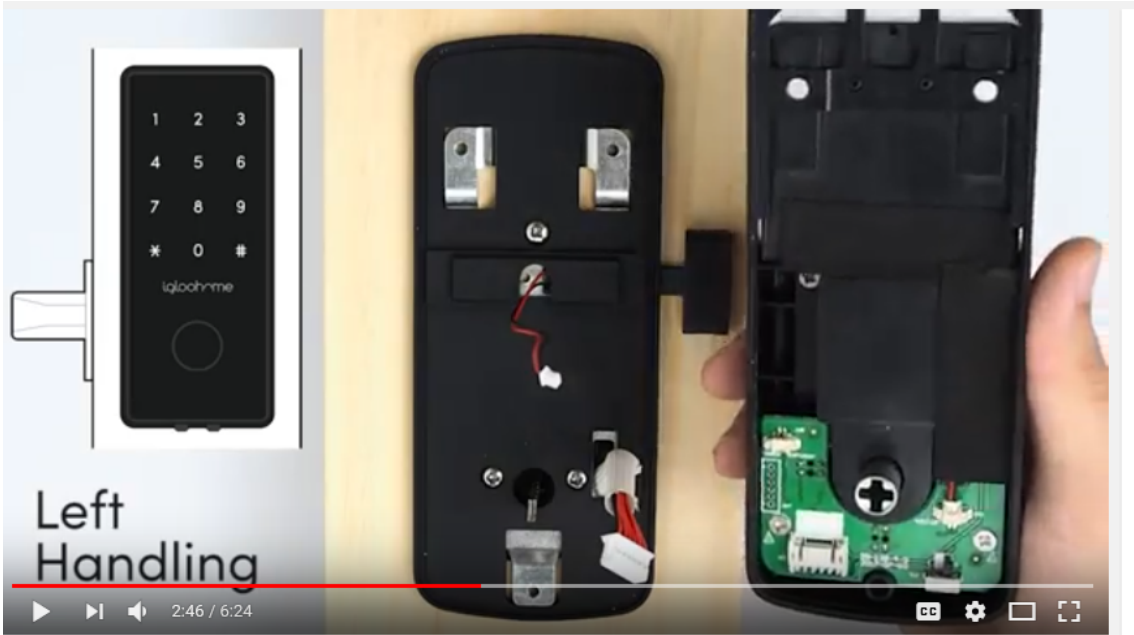
<https://igloohome.freshdesk.com/support/solutions/articles/35000013952-how-does-pin-code-unlock-work->



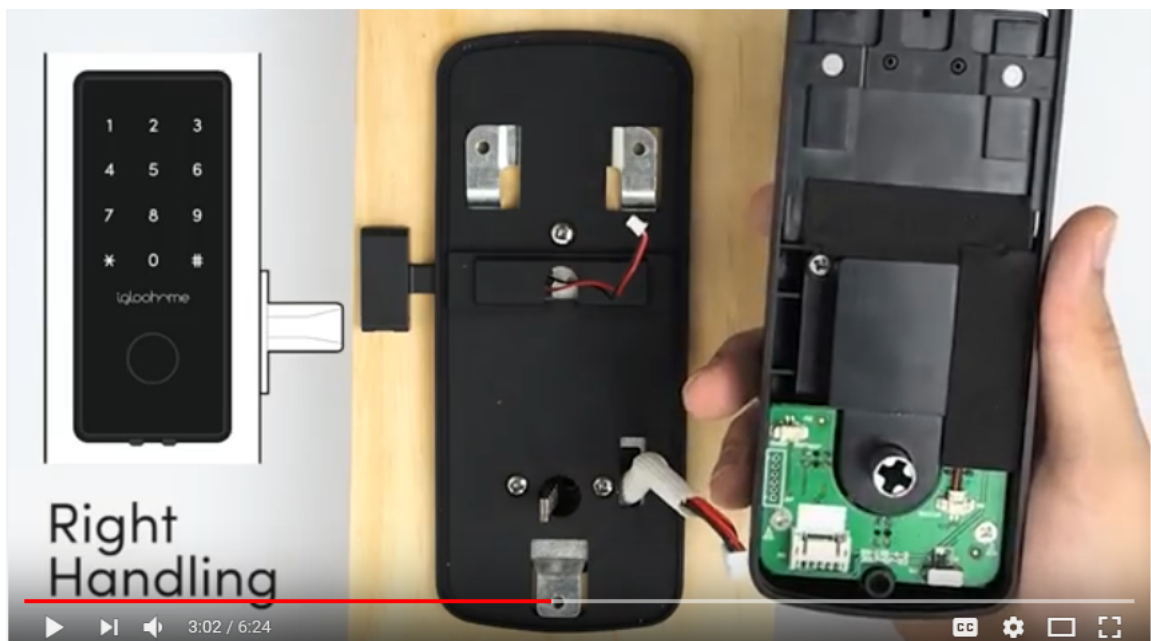
<https://youtu.be/FIQnhkTUpms?t=30>.



<https://youtu.be/FIQnhkTUpms?t=31>.



[https://youtu.be/PHZkBdq3\\_WY?t=166](https://youtu.be/PHZkBdq3_WY?t=166).



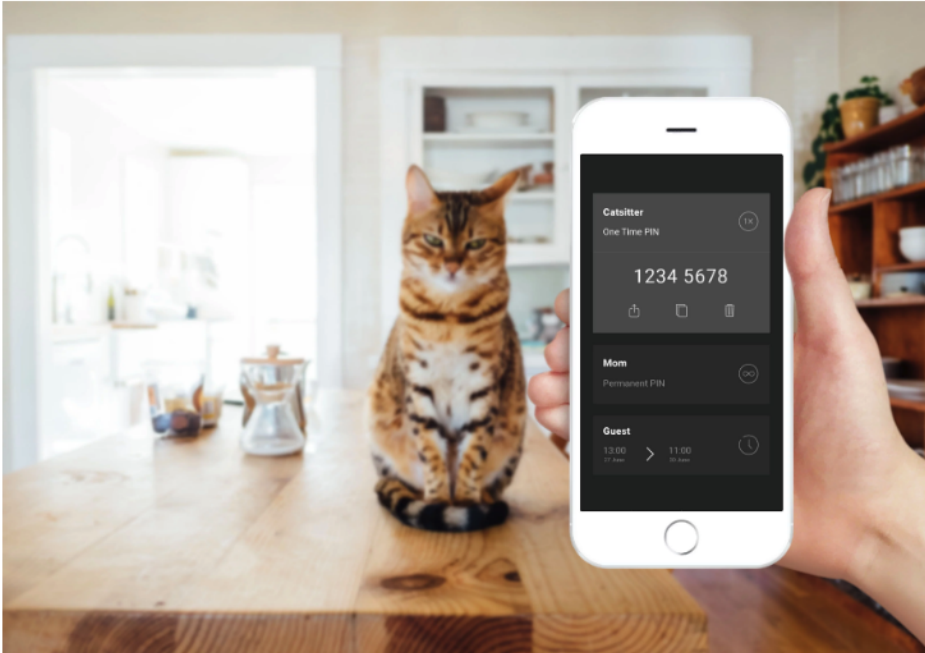
[https://youtu.be/PHZkBdq3\\_WY?t=182](https://youtu.be/PHZkBdq3_WY?t=182).

42. Smart Deadbolt includes an access code entry unit configured to accept a one-time use access-code issued by a remote server.



<https://www.igloohome.co/products/deadbolt-2s/>.

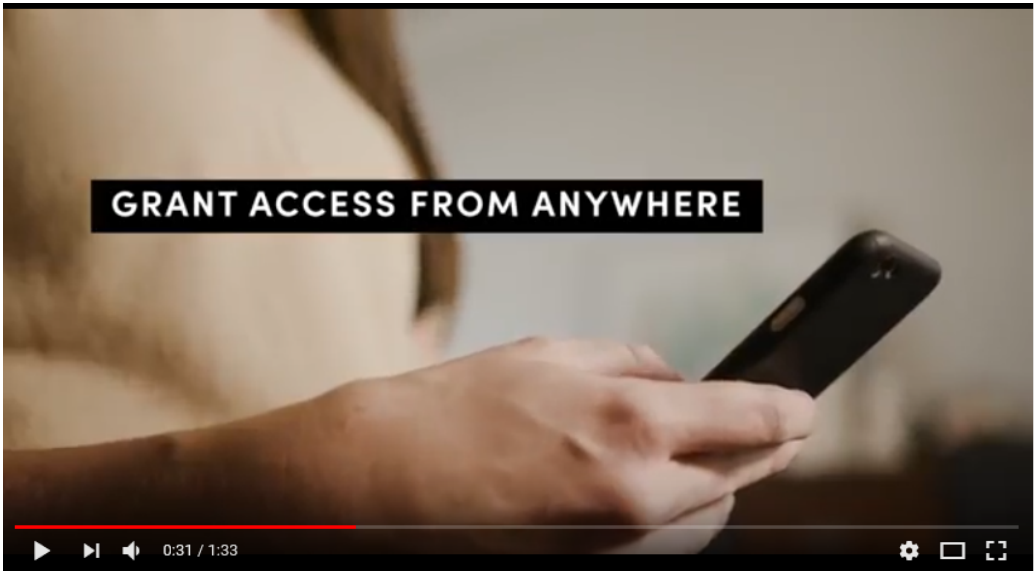




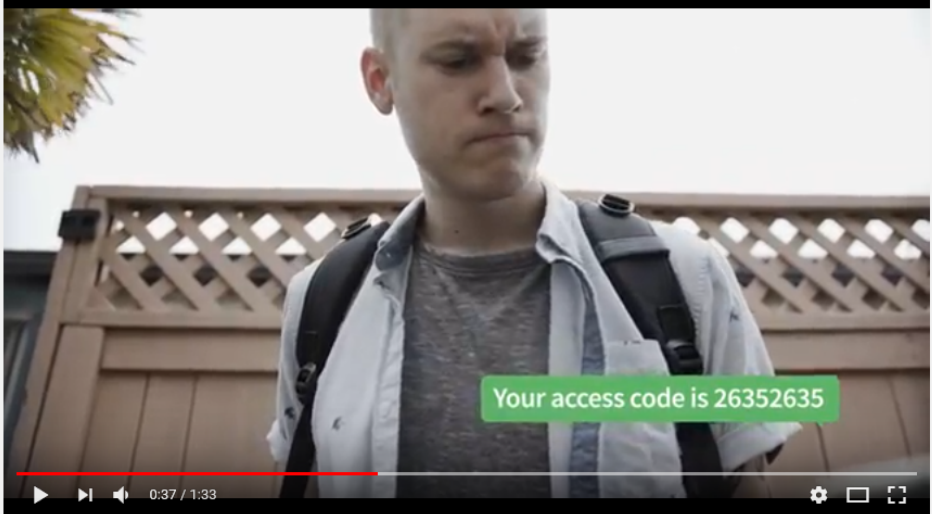
**Grant access to your home even when you're away.**

With the igloohome mobile app, create PIN codes or bluetooth keys, and select how long you want them to be valid for. Send them to your visitors from the app.

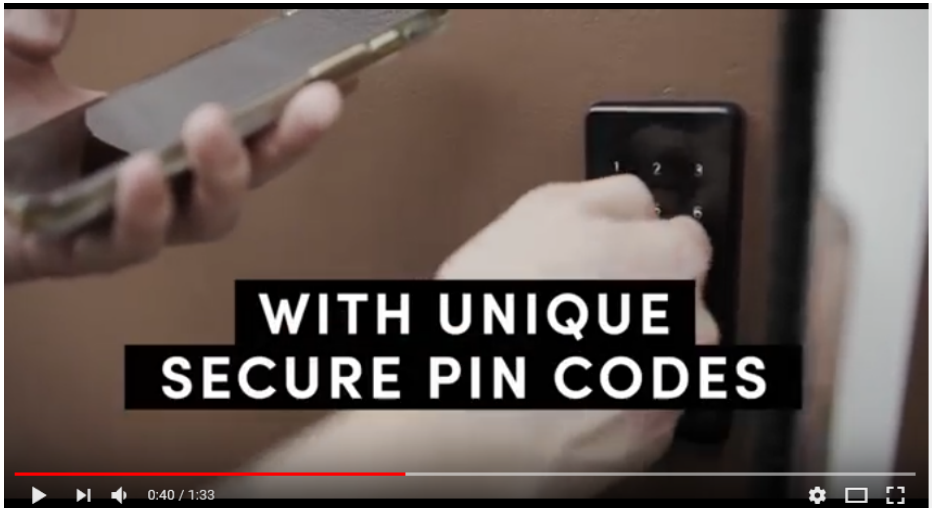
[https://www.igloohome.co/products/deadbolt-2s/?\\_ga=2.138503479.520391978.1555300236-562153576.1554518717.](https://www.igloohome.co/products/deadbolt-2s/?_ga=2.138503479.520391978.1555300236-562153576.1554518717)



[https://youtu.be/Kwuxk7XPrEM?t=31.](https://youtu.be/Kwuxk7XPrEM?t=31)



<https://youtu.be/Kwuxk7XPrEM?t=37>.



<https://youtu.be/Kwuxk7XPrEM?t=40>.



<https://youtu.be/Kwuxk7XPrEM?t=46>.

## I am a guest. How do I unlock the door?



Modified on: Thu, 7 Feb, 2019 at 4:16 PM

If you are a guest, your host would have provided you with one of the following methods of entry:

### **PIN code**

- The PIN code is a series of numbers that you can key into the igloohome smart lock.
- After keying in your PIN, press the # key to unlock (Key icon for Latch Model).
- Depending on the type of PIN code your host has given you, it may expire.

### **Bluetooth Unlock**

- Open the igloohome app and login
- Go to Visits under the Menu, and you will be able to view your Bluetooth Key(s).
- Click on the Bluetooth Key icon to unlock.
- Make sure that you have a strong Bluetooth and Internet connection on your phone.

<https://igloohome.freshdesk.com/support/solutions/articles/35000013987-i-am-a-guest-how-do-i-unlock-the-door->.

# Managing Access in App

## 1 Creating PIN codes

PIN codes can be generated on the app under **[Access]**, create **[New Key]** and choose either One-Time, Permanent or Duration PIN.

Pin codes will expire if its not use within its activation period. Refer to the table below.

PIN Type	Use PIN within*
One-Time PIN	6 hrs of generation
Permanent PIN	24hrs of generation
Duration PIN	24hrs from the start time

## 2 Bluetooth Guest Key

Bluetooth Guest Key can be shared with other users for mobile access. It allows your guests to unlock the igloohome smart lock via Bluetooth.

There are 3 steps to using a Shared Bluetooth Key

- Under **[Access]**, create **[New Key]** and choose **[Bluetooth Key]** under **[Access Type]**. Proceed to share the key after it is created.
- Guest receives the Bluetooth Key by one of these methods:
  - Clicking the URL given and follow the instructions.
  - Scanning the QR code under **[Visits]**.
- Guest can now use the Bluetooth Key under **[Visits]** whenever he is within range of the lock.

Notes:

- The owner can revoke the Bluetooth Key in App.
- Bluetooth Key must be accepted within 1 hour generation before it expires.

## 3 Resetting PIN codes

Ensure that Bluetooth is switched on, and you are within Bluetooth range of the lock.

Go to Home > Select Lock Name > **[Settings]** > Reset Pins

Lock will reset all codes, except for Master PIN, and all PIN codes previously generated are no longer valid.

23

Manual at p. 23.

## Can I create temporary PIN codes?



Modified on: Wed, 1 Nov, 2017 at 5:21 PM

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Yes, they can be generated remotely via the igloohome app as long as there is internet connection on your phone.

<https://igloohome.freshdesk.com/support/solutions/articles/35000013956-can-i-create-temporary-pin-codes->.

## What types of access codes can I set?



Modified on: Thu, 7 Feb, 2019 at 5:32 PM

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You can create PIN and Bluetooth keys for friends, family or other visitors.

The igloohome app allows you to generate 3 types of PIN codes and bluetooth keys:

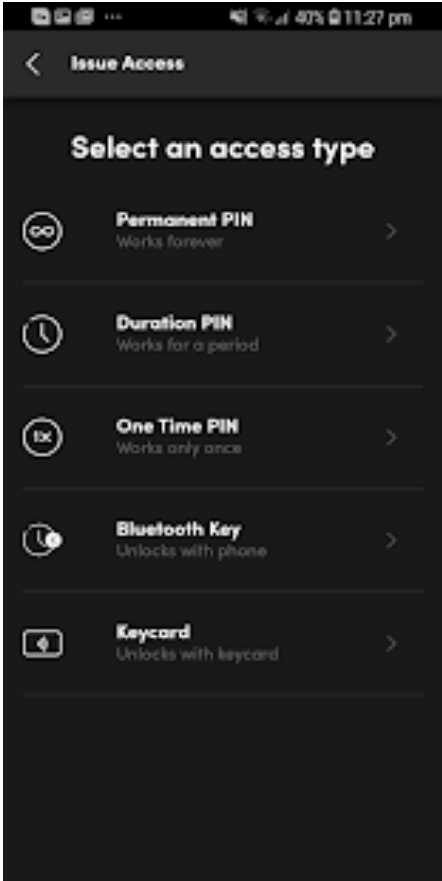
**One-Time PINs** must be used within 6 hours after creation

**Permanent PINs** must be used within 24 hours after creation

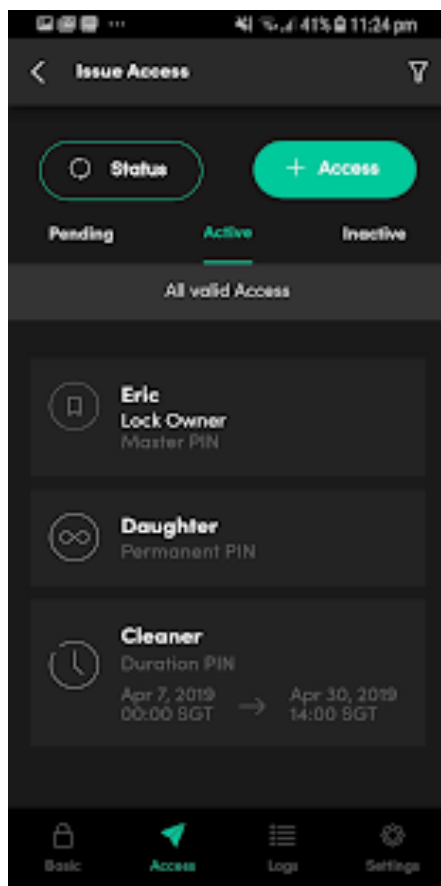
**Duration PINs** must be used within 24 hours of start time

**Bluetooth keys** must be used within one hour after creation

<https://igloohome.freshdesk.com/support/solutions/articles/35000013989-what-types-of-access-codes-can-i-set->.



<https://play.google.com/store/apps/details?id=com.igloo.home&hl=en>.



*Id.*

The igloohome app allows users to manage their igloohome smart locks or igloohome smart keyboxes. Grant visitors access to your home or property from any time and place. Through the igloohome app, you can send a PIN code or Bluetooth key to anyone via email/SMS/Whatsapp/other communication platforms, for the duration that you select. Through the igloohome mobile app, you can also check the access logs to see who and when someone has entered your property.

*Id.*

## Access at your fingertips

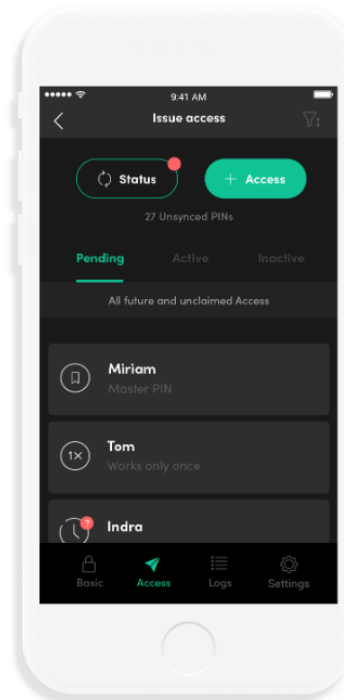
All igloohome devices work with the igloohome mobile app. You can manage access to your property anytime, anywhere.

### Grant access anytime, anywhere.

Via the mobile app, you can send PIN codes and Bluetooth keys from wherever you are. Our unique AlgoCode technology makes this possible, so you don't have to be near the Deadbolt to grant access to those who need it.

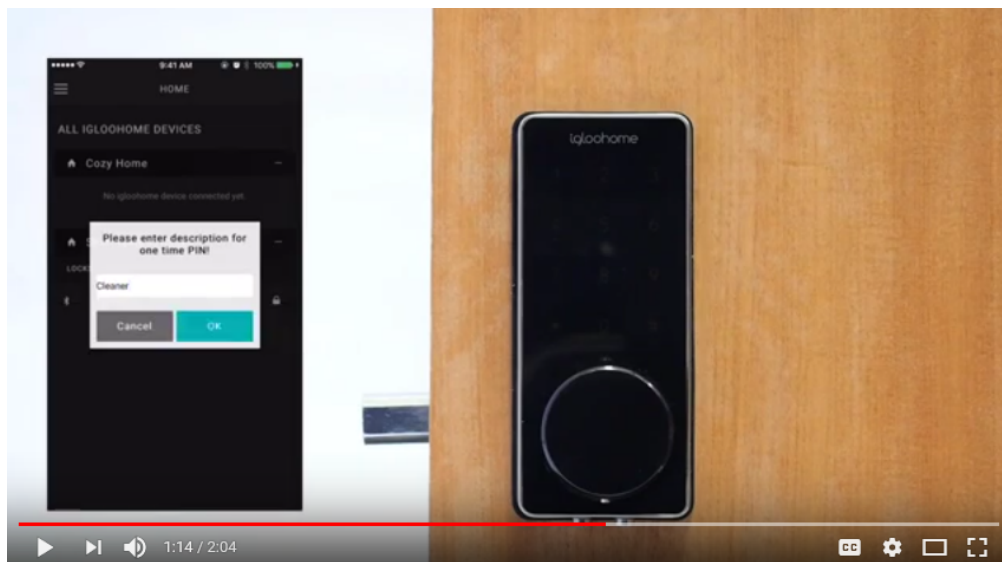
### Greater peace of mind.

Unlike conventional locks, the igloohome mobile app allows you to track dates and times of which visitors enter your home. Activity logs provides greater visibility for a greater peace of mind.



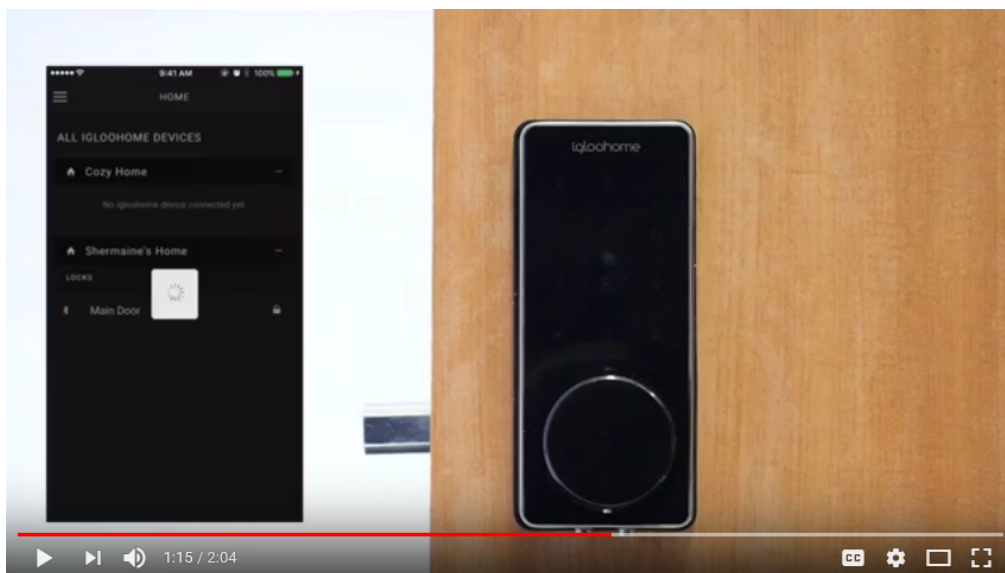
<https://www.igloohome.co/deadbolt-2s>.

43. Upon information and belief, the one-time use access code comprises a number generated by a cryptographically strong random number generator.



<https://youtu.be/o0ec9foAPyY?t=74>.





<https://youtu.be/o0ec9foAPyY?t=75>.

## How do I create PIN codes?



Modified on: Wed, 1 Nov, 2017 at 5:20 PM

PIN codes can be generated on the app in 2 ways:

1. On the **Home screen**, click on the lock name and select either One Time, Permanent or Duration PIN.
2. On the **Lock Info page**, go to the PIN tab (second icon on the bottom tray), click on the "Add" icon, and select your desired PIN code type.

<https://igloohome.freshdesk.com/support/solutions/articles/35000013836-how-do-i-create-pin-codes->

### WILLFULNESS AND INDIRECT INFRINGEMENT

44. Smart Locking Technologies repeats and realleges the allegations of paragraphs 1 through 43 as if fully set forth herein.

45. Smart Locking Technologies' initial complaint was filed on May 29, 2019.

46. Defendant was served the complaint on May 30, 2019.

47. Defendant has been on notice of the '918 and '873 patents since, at the latest, its receipt of the complaint.

48. Thus, Defendant has been on notice of the '918 and '873 patents since, at the latest, the date it was served the Complaint.

49. Upon information and belief, Defendant has not altered its infringing conduct after receiving the initial complaint.

50. Upon information and belief, Defendant's continued infringement despite its knowledge of the '918 and '873 patents and the accusations of infringement has been objectively reckless and willful.

51. In particular, Defendant's customers' and end-users' use of Defendant's products that include a locking mechanism or locking device, including, but not limited to, Smart Deadbolt, that is facilitated by the use of the technology patented under the '918 and '873 patents. Thus, Defendant's customers and end-users are able to use and benefit from a locking mechanism or locking device that is able to use a non-permanent use or one-time use access code.

52. On information and belief, in order to generate profits and revenues, Defendant markets and promotes, e.g., through its websites, advertising and sales personnel, the use of its products that infringe the '918 and '873 patents when used as intended by Defendant's customers and end-users. Defendant's customers and end-users use such products (including, e.g., Smart Deadbolt). Defendant further instructs its customers and end-users how to use such products in a manner that infringes the '918 and '873 patents (e.g., through on-line technical documentation, instructions, and technical support). Defendant further instructs its customers and end-users to infringe the '918 and '873 patents through the products themselves, e.g., through instructions.

53. In particular, Defendant instructs its customers and end-users through at least on-line support instructions and documentation over the Internet how to use the Smart Deadbolt.

54. Defendant still further makes such products accessible to its customers and end-users via the Internet, thus enabling and encouraging its customers and end-users to use such products to infringe the '918 and '873 patents.

55. On information and belief, even though Defendant has been aware of the '918 and '873 patents and that its customers and end-users infringe the '918 and '873 patents since no later than the date it was served the Complaint and Defendant has neither made any changes to the functionality, operations, marketing, sales, technical support, etc. of such products to avoid infringing the '918 and '873 patents nor informed its customers or end-users how to avoid infringing the '918 and '873 patents. To date, Defendant has not identified a single action that it has taken to avoid infringement (e.g., by designing around or notifying its customers or end-users how to avoid infringement) by itself or its customers or end-users since it became aware of the '918 and '873 patents.

56. On information and belief, Defendant itself is unaware of any legal or factual basis that its actions solely, or in combination with the actions of its customers and end-users, do not constitute direct or indirect infringement of the '918 and '873 patents. To date, Defendant has not produced any opinion of counsel, request for opinion of counsel relating to the scope, interpretation, construction, enforceability, unenforceability, or the infringement or potential infringement of any claim of the '918 and '873 patents. In addition, Defendant has not produced any complete evaluation, analysis, or investigation relating to the validity of the '918 and '873 patents.

57. As such, on information and belief, despite the information Defendant obtained from the original complaint in this action, Defendant continues to specifically intend for and encourage its customers and end-users to use its products in a manner that infringes the claims of the '918 and '873 patents. In addition, since at least the filing of the original complaint in this action, Defendant has deliberately avoided taking any actions (e.g., designing around, or providing notice to its customers) to avoid confirming that its actions continue to specifically encourage its customers and end-users to use their products in a manner that infringes the claims of the '918 and '873 patents.

Defendant's actions of, *inter alia*, making, importing, using, offering for sale, and/or selling such products constitute an objectively high likelihood of infringement of the '918 and '873 patents, which were duly issued by the United States Patent and Trademark Office and are presumed valid. Since at least the filing of the original complaint, Defendant is aware that there is an objectively high likelihood that its actions constituted, and continue to constitute, infringement of the '918 and '873 patents and that the '918 and '873 patents are valid. Despite Defendant's knowledge of that risk, on information and belief, Defendant has not made any changes to the relevant operation of its accused products and has not provided its users and/or customers with instructions on how to avoid infringement of the '918 and '873 patents. Instead, Defendant has continued to, and still is continuing to, among other things, make, use, offer for sale, and/or sell products and/or services patented under the '918 and '873 patents. As such, Defendant willfully, wantonly and deliberately infringed and is infringing the '918 and '873 patents in disregard of Smart Locking Technologies' rights under the '918 and '873 patents

**JURY DEMAND**

Smart Locking Technologies hereby demands a trial by jury on all issues so triable.

**PRAYER FOR RELIEF**

WHEREFORE, Smart Locking Technologies requests that this Court enter judgment against Defendant as follows:

- A. An adjudication that Defendant has infringed the '918 and '873 patents;
- B. A judgment that Defendant has induced infringement of the '918 and '873 patents;
- C. An award of damages to be paid by Defendant adequate to compensate Smart Locking Technologies for Defendant's past infringement of the '918 and '873 patents and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;
- D. An award of enhanced damages pursuant to 35 U.S.C. § 284 for Defendant's willful infringement of the '918 and '873 patents subsequent to the date of its notice of the '918 and '873 patents;
- E. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Smart Locking Technologies' reasonable attorneys' fees; and
- F. An award to Smart Locking Technologies of such further relief at law or in equity as the Court deems just and proper.

Dated: September 3, 2019

STAMOULIS & WEINBLATT LLC

/s/ Richard C. Weinblatt

Stamatios Stamoulis (#4606)

Richard C. Weinblatt (#5080)

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*Attorneys for Plaintiff*

*Smart Locking Technologies LLC*

**CERTIFICATE OF SERVICE**

I hereby certify that on September 3, 2019, I electronically filed the above document(s) with the Clerk of Court using CM/ECF which will send electronic notification of such filing(s) to all registered counsel.

/s/ Richard C. Weinblatt

Richard C. Weinblatt #5080