





## INVESTIGATIVE USES OF VIDEO DOORBELLS: A GUIDE FOR PROSECUTORS

November 2024

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Introduction	1
How It Works	1
Motion Sensors	2
2-Way Audio Capabilities	
Live Streaming	
Cloud Storage	
Discounts and Giveaways to Encourage Consensual Police Access	
Investigative Uses	
Map Showing Law Enforcement Agencies Who Use the Ring App	
Owner Consent	
Obtaining Information from the Manufacturer	
Exigent Circumstances Exception	
Introducing Video Doorbell Evidence at Trial	
CONCLUSION	

#### **ACKNOWLEDGEMENTS**

This article was written by Kristine Hamann, Executive Director of Prosecutors' Center for Excellence and Deputy County Attorney Jason Kalish of the Maricopa County Attorney's Office (AZ). John Wilkinson and Jennifer Newman of AEquitas gave very helpful editorial advice and Georgetown law students Chloe Clunis and Dylan Kang provided excellent research and writing for the article.

This paper was supported by Grant No. 2017-YX-BX-K002 awarded by the Bureau of Justice Assistance to AEquitas. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the authors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

#### INVESTIGATIVE USES OF VIDEO DOORBELLS

#### INTRODUCTION

Private security cameras, commonly called "video doorbells," monitor private property, provide live alerts, stream video, and connect with other smart devices. Video doorbells are a subset of the fast-growing "smart security systems" market that connect with an owner's cell phone interface through wireless internet. Users feel connected and protected with video doorbell cameras that can zoom with 1080p pixel-rich quality and a wide-angle lens range of up to 130 degrees. In 2018, consumers purchased more than an estimated 3.4 million video doorbells. In 2022, consumers purchased more than an estimated 11.7 million video doorbells. With their increase in popular use, video doorbells have become more prevalent as the source of evidence in criminal cases. This article will describe how they work, explore investigative issues relating to video doorbells, and end with a discussion of how to introduce videos from the doorbells at trial.

#### **HOW IT WORKS**

There are multiple video doorbell products on the market advertising a variety of features and easy installation.<sup>4</sup> In an investigation, several of the features affect how police and prosecutors can use footage and data to save costs, maximize time, and ensure accuracy. Some popular features include:

<sup>&</sup>lt;sup>1</sup> Lauren Smiley, *The Porch Pirate of Potrero Hill Can't Believe It Came to This*, THE ATLANTIC (Nov. 1, 2019), <a href="https://www.theatlantic.com/technology/archive/2019/11/stealing-amazon-packages-age-nextdoor/598156/">https://www.theatlantic.com/technology/archive/2019/11/stealing-amazon-packages-age-nextdoor/598156/</a>.

<sup>&</sup>lt;sup>2</sup> Alfred Ng, *Amazon's helping police build a surveillance network with Ring doorbells*, CNET (June 5, 2019), <a href="https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells/">https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells/</a>.

<sup>&</sup>lt;sup>3</sup> Strategy Analytics: Amazon's Ring Remained atop the Video Doorbell Market in 2021, Businesswire (June 22, 2022), <a href="https://www.businesswire.com/news/home/20220622005023/en/Strategy-Analytics-Amazons-Ring-Remained-atop-the-Video-Doorbell-Market-in-2021">https://www.businesswire.com/news/home/20220622005023/en/Strategy-Analytics-Amazons-Ring-Remained-atop-the-Video-Doorbell-Market-in-2021</a>.

<sup>&</sup>lt;sup>4</sup> For example, tech giants Amazon and Google own the two most popular video doorbell products, Ring, Inc. ("Ring") and Nest ("Nest"), respectively. In 2018, Amazon purchased and began marketing for Ring as "a ring of security around your home." The estimated \$1.8 billion purchase was Amazon's second-largest acquisition ever. Theodere Schleifer and Jason Del Ray, Amazon is making its second-biggest acquisition ever — the doorbell company Ring, VOX (Feb. 27, 2018), <a href="https://www.vox.com/2018/2/27/17059768/amazon-ring-acquisition-doorbell">https://www.vox.com/2018/2/27/17059768/amazon-ring-acquisition-doorbell</a>.

#### **Motion Sensors**

Once connected to a cellphone, the video doorbell alerts its user whenever someone approaches the door or comes within camera range. Some products have motion sensor detection features that automatically start recording. Others, like Google's "Nest Cam IQ," can detect a person up to 50 feet away, then alert the owner with a photo of who's there.

#### 2-Way Audio Capabilities

Even when away from home, a user can view a High Definition ("HD") video stream of the person and speak to them using two-way audio communications, even using programs like Alexa<sup>7</sup> or via announcements on their Chromecast or Android TV.<sup>8</sup> Users can interact with visitors and trespassers through the video doorbell, assess the situation, and directly contact the police for dispatch.<sup>9</sup>

#### **Live Streaming**

Live streaming allows users to stream live HD video while away to view the recording regardless of whether or not an alert triggers. Many of these manufacturers bundle the benefits of live streaming with its other features or offer it as an additional subscription service.

<sup>&</sup>lt;sup>5</sup> Wired Doorbell Pro, RING, <a href="https://ring.com/support/products/doorbells/wired-doorbell-pro?page=1">https://ring.com/support/products/doorbells/wired-doorbell-pro?page=1</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>6</sup> Google purchased Nest for \$3.2 billion in 2014. *See*: Christopher Coble, *Are the Cops in Your Nest? How Smart Home Devices Are Turning Into Surveillance Tools*, FINDLAW (Oct. 22, 2018), <a href="https://blogs.findlaw.com/blotter/2018/10/are-the-cops-in-your-nest-how-smart-home-devices-are-turning-into-surveillance-tools.html">https://blogs.findlaw.com/blotter/2018/10/are-the-cops-in-your-nest-how-smart-home-devices-are-turning-into-surveillance-tools.html</a>.

<sup>&</sup>lt;sup>7</sup> Two-Way Communication with Amazon Echo Devices, RING, <a href="https://ring.com/support/articles/26ing/Two-Way-Communication-with-Amazon-Echo-Devices">https://ring.com/support/articles/26ing/Two-Way-Communication-with-Amazon-Echo-Devices</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>8</sup> Get doorbell visitor announcements on a speaker or display, GOOGLE, <a href="https://support.google.com/googlenest/answer/7672451?sjid=12550599579095678748-NC">https://support.google.com/googlenest/answer/7672451?sjid=12550599579095678748-NC</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>9</sup> Professional Monitoring Emergency Response Plans, RING, <a href="https://ring.com/support/articles/7hiub/Professional-Monitoring-Emergency-Response-Plans">https://ring.com/support/articles/7hiub/Professional-Monitoring-Emergency-Response-Plans</a> (last visited November 7, 2024); and Talk and listen with Nest camera or doorbell, GOOGLE, <a href="https://support.google.com/googlenest/answer/9219455?sjid=12550599579095678748-NC">https://support.google.com/googlenest/answer/9219455?sjid=12550599579095678748-NC</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>10</sup> Live View for Doorbells and Cameras, RING, <a href="https://ring.com/support/articles/sjo2f/Using-Live-View">https://ring.com/support/articles/sjo2f/Using-Live-View</a> (last visited November 7, 2024); Share Nest camera live video, GOOGLE,

https://support.google.com/googlenest/answer/9227530?sjid=12550599579095678748-NC (last visited November 7, 2024).

<sup>&</sup>lt;sup>11</sup> See, e.g., Subscription Plans for Home Security, RING, <a href="https://ring.com/protect-plans">https://ring.com/protect-plans</a> (last visited November 7, 2024).

#### **Cloud Storage**

Most of these products have cloud-based storage with a storage limit and downloading capabilities, though some models like the "Wyze Cam Pan" also offer a local storage option like a built-in microSD card. Ring users can also opt for a subscription to the Ring Protect Plan to extend their storage capabilities. Once a user becomes a member, all of the videos recorded by Ring devices are saved to the user's cloud account for 60 days. The videos can also be download to a user's computer for storage within that 60-day time frame. Google also allows users to store up to 60 days of video through their Nest Aware subscription.

#### Discounts and Giveaways to Encourage Consensual Police Access

Video doorbell owners may have additional incentives to consent from discounted products and giveaways. Police departments across the country, from major cities like Houston to towns with fewer than 30,000 people, have offered free or discounted video doorbells to citizens, sometimes using taxpayer funds, to pay for the products. <sup>17</sup> In some giveaways, police require recipients to turn over footage when requested. <sup>18</sup> Even some city councils are distributing video doorbells to promote community safety; for example, the Akron (Ohio) City Council distributed over 400 Ring doorbells as part of an initiative designed to combat neighborhood crime and prevent package theft for residents. <sup>19</sup>

<sup>&</sup>lt;sup>12</sup> Thomas Shaw, *The Best Home Security Cameras of 2024*, CNET, <a href="https://www.cnet.com/news/best-home-security-cameras-of-2019-arlo-wyze-nest/">https://www.cnet.com/news/best-home-security-cameras-of-2019-arlo-wyze-nest/</a>.

<sup>&</sup>lt;sup>13</sup> Id supra note 11.

<sup>&</sup>lt;sup>14</sup> Understanding and Adjusting Your Video Storage Time, RING, https://ring.com/support/articles/1nce1/Understanding-and-Adjusting-Your-

https://ring.com/support/articles/1nce1/Understanding-and-Adjusting-Your-Video-Storage-Time (last visited November 7, 2024).

<sup>&</sup>lt;sup>15</sup> Downloading and Sharing Your Ring Videos, RING, <a href="https://ring.com/support/articles/rul14/Downloading-and-sharing-Your-Ring-Videos">https://ring.com/support/articles/rul14/Downloading-and-sharing-Your-Ring-Videos</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>16</sup> What you get with a Nest Aware subscription, GOOGLE, <a href="https://support.google.com/googlenest/answer/9233159?sjid=12550599579095678748-NC">https://support.google.com/googlenest/answer/9233159?sjid=12550599579095678748-NC</a> (last visited November 7 2024)

<sup>&</sup>lt;sup>17</sup> Alfred Ng, *Amazon's helping police build a surveillance network with Ring doorbells*, CNET (June 5, 2019), <a href="https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells">https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells</a>; and Smiley, *supra* note 1

<sup>&</sup>lt;sup>18</sup> Alfred Ng, *Amazon's helping police build a surveillance network with Ring doorbells*, CNET (June 5, 2019), <a href="https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells/">https://www.cnet.com/features/amazons-helping-police-build-a-surveillance-network-with-ring-doorbells/</a>.

<sup>19</sup> *2024 Ring Doorbell Camera*, AKRON CITY COUNCIL, <a href="https://www.akroncitycouncil.org/news/2024-ring-doorbell-camera">https://www.akroncitycouncil.org/news/2024-ring-doorbell-camera</a> (last visited November 7, 2024).

#### **INVESTIGATIVE USES**

While innovative, video doorbells can help investigate and prosecute crime in the same way home security cameras have for decades. Local police have long engaged in the practice of knocking on doors and asking residents to voluntarily provide information, including video recordings from any home security systems, to help investigate, solve, and prevent crimes. In the past, crimes of opportunity like burglary made it difficult to identify a suspect because such crimes often took place without any witnesses to the actual act.

Video doorbells can be instrumental when it comes to apprehending doorstep "package pirates," providing key leads in burglary investigations, and, in some cases, saving lives. For example, police closed an investigation after finding no signs on the scene of a reported kidnapping. They later reopened the case after receiving a Ring doorbell video that recorded the chilling screams of the victim and identifying the car driving away with the victim.<sup>20</sup> In another instance, Rutherford County (Tennessee) Sheriff's office used private video doorbells to corroborate statements, investigate leads, and solve at least two homicides.<sup>21</sup>

The key differences between modern home surveillance tools and those utilitized in the past are the mode of communication and the ability to remotely control the devices. The implementation and success of these tools in investigations are based on the combination of the manufacturer policies, the local budget, and community engagement.<sup>22</sup>

<sup>&</sup>lt;sup>20</sup> Erika Martin, *Possible Kidnapping Investigated After Woman's Screams Captured on Doorbell Video in Leimert Park*, KTLA5 (Nov. 14, 2019), <a href="https://ktla.com/2019/11/14/possible-kidnapping-investigated-after-womans-screams-captured-on-doorbell-video-in-leimert-park/">https://ktla.com/2019/11/14/possible-kidnapping-investigated-after-womans-screams-captured-on-doorbell-video-in-leimert-park/</a>.

<sup>&</sup>lt;sup>21</sup> Brinley Hineman, *How Self-monitored home security cameras crack down on crime in Rutherford County*, Murfreesboro Daily News Journal (Nov. 5, 2019), <a href="https://www.dnj.com/story/news/2019/11/05/self-monitored-home-security-cameras-ring-doorbell-crack-down-crime-rutherford-county/4114658002/">https://www.dnj.com/story/news/2019/11/05/self-monitored-home-security-cameras-ring-doorbell-crack-down-crime-rutherford-county/4114658002/</a>.

<sup>&</sup>lt;sup>22</sup> See, e.g., Solomon Gustavo, Amazon's Ring doorbell partners with Florida police departments to make everyone a snitch, ORLANDO WEEKLY, (Oct. 16, 2019), <a href="https://www.orlandoweekly.com/news/amazon-partners-with-florida-police-departments-to-make-everyone-a-snitch-26147546">https://www.orlandoweekly.com/news/amazon-partners-with-florida-police-departments-to-make-everyone-a-snitch-26147546</a>; Don Sweeney, 'I'm going to die!' Man shot by captors pleads for help on Arizona doorbell video, The BEE, (Jan. 2, 2020),

https://www.sacbee.com/news/nation-world/national/article238904318.html; and Smiley, supra note 1.

Police do not have direct access to an owner's camera or system.<sup>23</sup> However, some manufacturers maintain a robust police partnership network.<sup>24</sup>

# The following is a list of public safety agencies that have joined Heybhors by Ring. This map is updated regularly. 20.443,002 views Published on June 21 SHARE Fire Departments A-Z xisx All items Local Law Enforcement A-L All items Local Law Enforcement M-Z All items Local Government Agencies Local Government Agencies All items

#### Map Showing Law Enforcement Agencies Who Use the Ring App

Obtaining recorded footage is an important investigative tool and can provide essential evidence. When seeking this footage, prosecutors and police have two options: (1) obtain owner consent or (2) obtain the information from the manufacturer.

<sup>&</sup>lt;sup>23</sup> Susan Hogan and Ambar Rodriguez, *Ring camera footage can be obtained by police. Here's how*, NBC WASHINGTON, (July 10, 2023), <a href="https://www.nbcwashington.com/news/consumer/ring-camera-footage-can-be-obtained-by-police-heres-how/3381940/">https://www.nbcwashington.com/news/consumer/ring-camera-footage-can-be-obtained-by-police-heres-how/3381940/</a>.

<sup>&</sup>lt;sup>24</sup>How Public Safety Agencies Use Neighbors, RING, <a href="https://support.ring.com/hc/en-us/articles/360031595491-">https://support.ring.com/hc/en-us/articles/360031595491-</a> How-Law-Enforcement-Uses-the-Neighbors-App (last visited November 7, 2024).

#### **Owner Consent**

The most effective way to get the footage of a crime is to get the owner's consent through direct contact or a product's app features. Because of the various subscription and storage features available, investigators should seek footage as soon as possible or submit a preservation notice to the manufacturer of the system<sup>25</sup> before disposal of the recording. An effective way to investigate a case is for the police to visit the neighborhood, talk with witnesses, and ask the owner for their surveillance footage.

#### Obtaining Information from the Manufacturer

In a case where the owner does not provide consent, or if the owner is the suspect, police can seek the recordings from the manufacturer. Video doorbell manufacturers generally comply with search warrants or subpoenas for users' footage. Police requesting footage must keep in mind that manufacturers will likely disclose their cooperation to the owner unless disclosure is limited in the subpoena or search warrant.

To avoid deletion of the recordings, police must act quickly and be mindful of the storage preservation policies of the various manufacturers. For example, Nest video doorbell users can delete their doorbell history at any time<sup>27</sup>, while Ring holds customer footage for up to 180 days.<sup>28</sup> For footage sought within this period, Ring will release customer information with a properly served "valid and binding legal demand."<sup>29</sup> Ring also states that it objects to overbroad or otherwise

<sup>&</sup>lt;sup>25</sup> Law Enforcement Legal Process Guidelines, RING, <a href="https://support.ring.com/hc/en-us/articles/360001318523-">https://support.ring.com/hc/en-us/articles/360001318523-</a> Law-Enforcement-Legal-Process-Guidelines (last visited November 7, 2024) (per Ring's internal storage protocol, the company states that it will extend past the 90 days, for a total of 180 days, after which the content may no longer be available.).

<sup>&</sup>lt;sup>26</sup> Learn About Ring Law Enforcement Guidelines, RING, <a href="https://ring.com/support/articles/oi8t6/Learn-About-Ring-Law-Enforcement-Guidelines">https://ring.com/support/articles/oi8t6/Learn-About-Ring-Law-Enforcement-Guidelines</a> (last visited November 7, 2024); <a href="https://nest.com/legal/transparency-report/">Transparency-Report</a>, NEST, <a href="https://nest.com/legal/transparency-report/">https://nest.com/legal/transparency-report/</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>27</sup> Delete video history and snapshots, GOOGLE,

https://support.google.com/googlenest/answer/9219185?hl=en&ref\_topic=9360774 (last visited November 7, 2024).

<sup>&</sup>lt;sup>28</sup> Understanding and Adjusting Your Video Storage Time, RING, <a href="https://ring.com/support/articles/1nce1/Understanding-and-Adjusting-Your-Video-Storage-Time">https://ring.com/support/articles/1nce1/Understanding-and-Adjusting-Your-Video-Storage-Time</a> (last visited November 7, 2024).

<sup>&</sup>lt;sup>29</sup> Law Enforcement Legal Process Guidelines, RING, <a href="https://support.ring.com/hc/en-us/articles/360001318523-Law-Enforcement-Legal-Process-Guidelines">https://support.ring.com/hc/en-us/articles/360001318523-Law-Enforcement-Legal-Process-Guidelines</a> (last visited November 7, 2024).

inappropriate demands as a matter of course.<sup>30</sup> It should be noted that Ring has stated that police cannot access – or even request – live video feeds.<sup>31</sup>

#### **Exigent Circumstances Exception**

Some video doorbell manufacturers will disclose customer information and footage to police without a user's consent under exigent or emergency circumstances.<sup>32</sup> Examples of circumstances that may be considered by the manufacturer are an active crime scene, missing child, endangered adult, or imminent threat of physical harm.

#### INTRODUCING VIDEO DOORBELL EVIDENCE AT TRIAL

Rule 901 of the Federal Rules of Evidence governs the authentication of evidence. In general, Rule 901(a) reads that to authenticate evidence "the proponent must produce evidence sufficient to support a finding that the item is what the proponent claims it is." Under Rule 901(b) there are two main ways that one could introduce video doorbell evidence. First, Rule 901(b)(1) allows testimony that "an item is what it is claimed to be." Second, Rule 901(b)(9) allows evidence "describing a process or system and showing that it produces an accurate result."

Courts that use the Federal Rules, including various state courts, describe the introduction of video evidence under Rule 901(b) as the "pictorial communication theory."<sup>33</sup> Introduction using the pictorial communication theory only requires a witness who observed what occurred in the video to testify that the video accurately reflects what they observed. The witness could have been present

<sup>30</sup> Id.

<sup>&</sup>lt;sup>31</sup> Jamie Siminoff, *Setting the Record Straight: Neighbors App Puts Users First*, RING BLOG, (August 28, 2019), https://blog.ring.com/2019/08/28/setting-the-record-straight-neighbors-app-puts-users-first/.

<sup>&</sup>lt;sup>32</sup> Law Enforcement Legal Process Guidelines, RING, <a href="https://support.ring.com/hc/en-us/articles/360001318523-Law-Enforcement-Legal-Process-Guidelines">https://support.ring.com/hc/en-us/articles/360001318523-Law-Enforcement-Legal-Process-Guidelines</a> (last visited November 14, 2019); Ring reiterated this limited exception in its Congressional response letter. Response Letter, Brian Huseman, Amazon Vice President to Sen. Ed. Markey (Nov. 1, 2019),

https://www.markey.senate.gov/imo/media/doc/Response%20Letter\_Ring\_Senator%20Markey%2011.01.2019.pd f ("[A]bsent exigent or emergency circumstance, Ring does not disclose customer information in response to government demands unless required to do so to comply with a legally valid binding order, such as a search warrant.").

<sup>&</sup>lt;sup>33</sup> See, e.g., Harrison v. State, \_\_ So.3d \_\_, 2023 WL 5314899 (Ala. Crim. App. 2023); Washington v. State, 961 A.2d 1110, 406 Md. 642 (2008); Wagner v. State, 707 So.2d 827 (App. Fla 1998); State v. Ollison, 78 N.E.3d 254 (App.Ohio 2016).

when the doorbell recorded the video<sup>34</sup>, or could have been watching the video on their phone or other device.

Alternatively, video or photos admitted under Rule 901(b)(9) are introduced under a "silent witness" theory. The homeowner could testify about the video doorbell system and how they store their videos, but would not need to testify that they saw the underlying event happen. The homeowner would also need to testify that they had not altered the video before turning it over to the police. While there are few, if any, cases reported with evidentiary objections to the introduction of video doorbell evidence under the silent witness theory, the introduction of such evidence would be very similar to the introduction of surveillance video where no witness could authenticate what happened on the video. 36

#### **CONCLUSION**

As the use of private security cameras grows and the technology improves, the recordings will increasingly be a source of valuable evidence. However, prosecutors must be mindful of privacy concerns from homeowners and the community, and expanding restrictions imposed by the manufacturers. The use of private security cameras is an evolving field both in practice and in the law.

<sup>&</sup>lt;sup>34</sup> For a case that used this method with a video doorbell, see unpublished Texas decision *Chatman v. State*, 2018 WL 6629531 (App.2018).

<sup>&</sup>lt;sup>35</sup> See, *Supra* note 26.

<sup>&</sup>lt;sup>36</sup> See, e.g., Irwin v. State, 229 N.E.3d 567 (App.Ind. 2024) (holding that the assigned detective was able to authenticate apartment surveillance video where he gave testimony surrounding his knowledge and experience regarding similar video footage systems and testified that based on that experience, he did not believe the video to have been altered); R.V. v. State, \_\_ So.3d \_\_, 2024 WL 696478 (App.Fla. 2024) (surveillance at group home was appropriately admitted under the "silent witness" theory where the state had the owner of the video system testify regarding the operation of the system and the process by which he archived it as well as identify the victim and location of the offense featured by the video and had the assigned detective testify as to obtaining the video and maintaining its chain of custody); Hooks v. State, \_\_ So.3d \_\_, 2023 WL 8658304 (Ala. Crim. App.2023) (the State did not present any witnesses who could testify that the video reliably and accurately reflected what they sensed at the time of the incident, and so were required to admit jail surveillance footage under the "silent witness" theory by authenticating the video.); Baez v. Commonwealth, 893 S.E.2d 604, 79 Va.App. 90 (2023) (bodyworn camera of a non-testifying officer could be authenticated by another officer familiar with the procedures by which the video was recorded and preserved).