Little Devices Have Big Ears



Today's technological environment makes it easy to have whatever you need at your fingertips or even at your command. We trade our privacy for the convenience of using personal assistant devices such as Alexa, Siri, Bixby, and OK Google as well as myriad applications ranging from health tracking to streaming media. By default, many personal assistant devices are 'always listening,' making it easier to target you with advertisements based on overheard conversations. While disarming, it is an extra cause for concern when we are working from home and sensitive conversations are subject to eavesdropping.

Many applications and "smart" devices listen for commands and can overhear conversations that contain proprietary or protected information. A 2020 <u>study</u> released by Northeastern University found that smart speakers, like Google Home devices or Amazon Echo, can accidentally <u>activate</u> 19 times a day and record 43 sec-

Hi. I'm Cortana.

Ask me a question!



onds of audio with each activation. Users can trigger these unintended activations when they say specific words or phrases, such as a hard "k" sound for Cortana, or "Hi" for Google or Alexa.

When you download applications, pay attention to the access permissions they request. Be sure that applications really need that access to your microphone, camera, or contacts to function. If they don't, it might be wise to find an application that is less invasive. Whereas it's always best to just <u>pull the plug</u>, that's not always feasible. Most smart phones, TVs, refrigerators, etc., allow you to disable their passive listening properties. You can also use application settings to deny microphone and camera permissions.

Given the sensitive nature of the work we do at IHS, it's a good idea to be aware of what devices may be listening and prevent it where possible. This newsletter shows you how to do this with some of the most popular devices.







Amazon Echo Dot

To turn the Amazon Echo Dot microphone off, push the **Microphone on/off** button on the top of your device. This button turns red to indicate the microphone is off. Some models also have a ring of light at the top of the Dot that displays blue when the microphone is on, red when it is off, and no light when the unit itself is turned off.



Siri (Apple products including Apple TV, iPhone, iPad, and iPod touch)

You can disable Siri on your Apple TV by performing the following steps:

- Open Settings on Apple TV.
- Go to General > Siri, then select the Off setting.

iPhones allow you to opt to disable Siri by performing the following steps:

- 1. Access your phone's Settings (), and tap Siri & Search (for iPhones running iOS 10 and older, tap the General tab and Siri).
- 2. Deselect the Listen for "Hey Siri", Press Side Button for Siri (or Press Home for Siri on some models) and Allow Siri When Locked.

Note that some models also require you to select **Turn Off Siri**.

You can also check what apps have <u>access</u> to your iPhone's microphone by accessing your **Settings (o)**, then selecting **Privacy > Microphone**.

Apple Customer Service gives the directions for turning off **Classic Voice Control** on your iPhone, iPad, or iPod touch here.



Android

Android Bixby voice assistant is available on Galaxy S21, S20, S20+, S20 Ultra, Note 20, Note 10, Note 10+, S10e, S10, S10+, Fold, Note 9, S9, S9+, S8, and S8+, as well as certain Samsung smart TVs.

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To disable the **Bixby** button on Galaxy S21, S20, Note 10, and Note 20 phones, perform the following steps:

- 1. Hold down the Volume down and Power buttons on the side of the phone until the options menu appears.
- Tap on the Side Key Settings near the bottom of the screen.
- 3. In the **Press and Hold** section at the bottom of the resulting screen, tap the Power off menu option.

Android phones also have the option to "Leave Bixby." Just be aware that doing so takes about a week and may delete some of your personal information, so proceed with caution. Also, some users have reported that Bixby "comes back" after they have used the Leave Bixby function.

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Remember that you can also remove cam-

era and microphone permissions for individual applications by using the applications' settings Privacy option.

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Samsung TV

To disable the Bixby passive listening function on your new Samsung TV, perform the following steps:

- 1. Select Settings () > General > Bixby Voice settings.
- 2. Select Voice wake-up > Voice response and set it to Off.
- 3. Select Voice wake-up > Voice wake-up and set it to Off.

This prevents the TV from listening for the 'Hi Bixby' wake words, but does not disable the microphone wake-up on your remote control.

Alexa is also a standard feature on some 2020 and most 2021 smart Samsung TVs. If you want to check whether it is on your TV, go to the home screen and scroll right until you find the Alexa app. The app provides on-screen instructions that include scanning a QR code with your phone and signing into your Amazon account.



Off

Google Voice Assistant

Your Google voice assistant may have the trigger **OK Google** or **Hey Google** depending on the application version. The methods to disable this application are similar. For the purpose of this document, we are using the **Hey Google** version available on later Android devices.

To disable OK Google on your phone, perform the following actions:

- 1. Open your phone's **Settings** (**(**) application.
- 2. Tap Google.
- 3. Tap **Settings for Google apps**. (On some phones, you need to tap **Account Services**.)
- 4. Tap Search, Assistant & Voice.
- 5. Tap Google Assistant.
- 6. Tap on the Google Assistant slider to turn it off.

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Access your Assistant any time you say "Hey Google", even if your screen is off or you're using your favorite apps



Conclusion

These features should be disabled in vicinity to your work area when on duty, especially for staff treating patients, to avoid HIPAA violations. If you have a device that isn't listed here, you can check the owner's manual to determine how to disable their access to speakers, microphone, or camera. If your device isn't included here, <u>http://www.manualsonline.com/</u> gives you access to thousands of manuals for everything from baby monitors to appliances to marine equipment.

Please report any agency-related information security incidents to the IHS Cybersecurity Incident Response Team (CSIRT) at <u>Incident@ihs.gov</u>. If you have any questions about this article, please contact us at <u>Cybersecurity@ihs.gov</u>.