

Ultrasonic Cross-Device Tracking: A Consumer Management Tool with FTC Warnings

Article By:

Theodore F. Claypoole

A consumer's television or computer may be emitting silent signals that her smartphone can hear, recognize and answer back, but the consumer can't sense them at all. These signals are telling retailers about their customer's habits and technology, but using the signals without appropriately informing consumers could land the retailer in hot water with the FTC.

Ultrasonic cross-device tracking technology finds and follows specific consumers through the use of embedded ultrasonic tones. These high frequency tones, which are silent to the human ear, can be emitted by advertisements, billboards, web pages, radio and television broadcasts, and even physical locations like brick-and-mortar retail and sports stadiums. Almost any device microphone, such as those in a mobile phone, can be enabled to detect the ultrasonic tones, and almost any device speaker can be used to respond to the tones.

Why would a business use ultrasonic signals in its applications? This technology can be used to track a customer's media use, whereby media audio sends out ultrasonic beams to a smartphone with an enabled app. Cross-device tracking is possible by transmitting ultrasonic beacons between a consumer's multiple devices. Retailers can track the location of their consumers by sending ultrasonic beams, which are detected by the consumers' mobile devices when they are in proximity to a brick-and-mortar store. In short, the technology allows the interaction of digital tools in the physical world.

This technology has already caught the attention of the FTC. In March 2016, the FTC issued a warning letter to app developers using SilverPush, an ultrasonic tracking software. The letter informed app developers that they must ask for users' permission to access their microphones, disclose what data would be collected, and how it would be used. The FTC expects app developers to make privacy policies easily accessible through app stores, provide disclosures, and obtain affirmative consent before collecting or sharing sensitive information. Adequate disclosure is especially important for apps that are superficially unrelated to the ultrasonic software they are equipped with. For example, researchers discovered that Pinoy Henry, a word and mind game popular in the Philippines, was enabled with ultrasonic tracking software without disclosure.

Researchers have found 234 Android apps that possess the ability to pick up ultrasonic tones without the user's knowledge. Consumers might not realize why apps are asking for their permission to

access their phone's microphone, or the full implication of that access. Clarity and disclosure are the best ways to avoid regulatory attention.

The FTC has indicated in its [cross-device tracking guidance](#) that even companies hiring app developers must ensure transparency in its cross-device tracking practices. In summary, work to comply with FTC best practices, cooperate with app developers, and comply with [the privacy policies of app platforms such as GooglePlay](#).

Copyright © 2025 Womble Bond Dickinson (US) LLP All Rights Reserved.

National Law Review, Volume VII, Number 144

Source URL: <https://natlawreview.com/article/ultrasonic-cross-device-tracking-consumer-management-tool-ftc-warnings>