



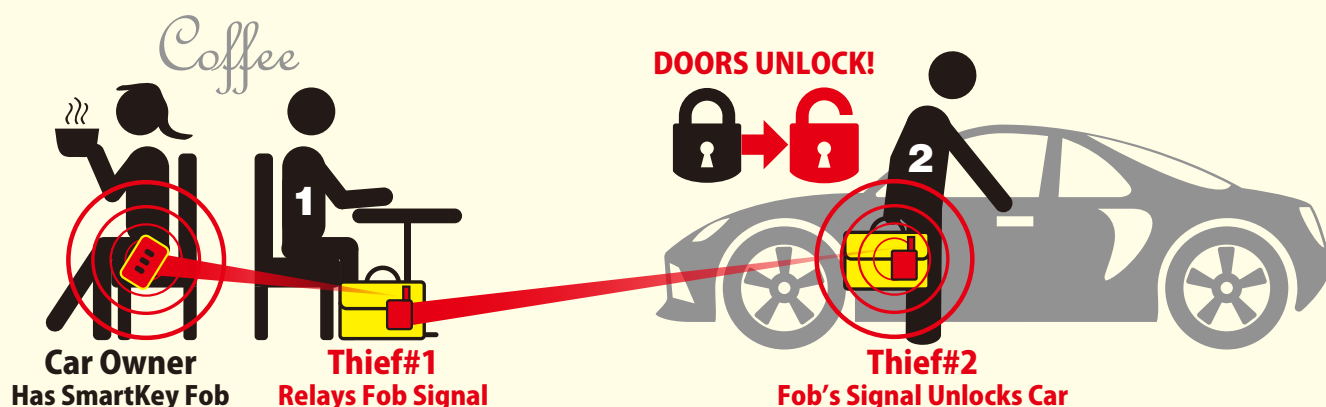
# Relay Attacks



## What is a Relay Attack?

**Smart-key Fobs are designed to have a *very short control distance* for good reason.** The fob must be in your pocket when you touch the outside door handle to Lock or Unlock, and the fob must be completely inside the car for you to Push Start the engine. If the control distance wasn't so short, anyone could touch your outside door handle and Unlock the doors, as long as the car continued to sense the wireless fob in your pocket.

**A Relay Attack extends the control distance of a Smart-key Fob to steal the car.** One thief gets close to the driver who has the Smart-key Fob, and without even touching the fob the thief wirelessly relays the fob's signal to a companion thief standing near the car who can then easily Unlock the doors or start the engine. *Note that Relay Attacks only affect Smart-key systems, so if you cannot touch the outside door handle to Lock or Unlock, your car is safe from Relay Attacks.*



Many modern car security systems use the keyless entry system to Arm on door Lock and Disarm on Unlock. A Relay Attack could allow a thief to Disarm your car's security system!

**SCIBORG® 640H & 540H security systems can now\* prevent Relay Attacks using either of 2 user-programmable methods.** **Method-1** disables Disarming by Unlock. Relay Attack thieves can still Unlock car doors, but opening a door would trigger the 640H/540H's full siren blast; and if an optional Starter Kill Relay is installed, thieves won't be able to start the engine. You can still Arm by Lock with Method-1 enabled, but Disarming requires use of either Manual Disarming (see Owner's Guide) or a wireless remote (optional purchase). **Method-2** (*patent pending*) requires only 2 presses of Unlock to Disarm. Method-2 is more convenient than Method-1, but when using a 540H security system, Method-2 currently only works on select Toyota cars. Simply put, SCIBORG security systems can protect your car from Relay Attacks.

KIRAMEK introduced an **RF Blocking Pouch** in 2019 for people who do not wish to have an electronic security system. The pouch blocks all RF signals to and from the keyless remote.

\*540H OS firmware T35 introduced Relay Attack Prevention Method-1. OS firmware T39 introduced Method-2 which requires Dec. 2017 or newer "vehicle" firmware† (currently, Toyota & Lexus only). 640H firmware T14 introduced Method-1 & Method-2. † Does NOT support Auto Speed-Locking or Door Locking with an optional remote.