PENNSYLVANIA STATE POLICE
COMMUNITY AWARENESS BULLETIN
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Digital Pickpockets



Have you ever wondered how you can wave your credit card over a scanner and it will automatically charge your account? Radio Frequency Identification (RFID) technology uses radio waves to transfer information that identifies people and objects. RFID technology is a convenient way to store and transfer information from one source to another. However, criminals have the ability to use RFID technology to exploit your personal information.

RFID technology uses embedded microchips to store information on identification cards, passports, credit cards, car keys, and security access cards. The microchips embedded into these devices use radio waves to transfer the information from the microchip to the RFID scanner. Although the information transmitted is encrypted, criminals have discovered ways to bypass the basic encryption and compromise your personal identifying information.[1]

How do thieves collect personal identifying information from your cards without physically touching them?



They could be using high-tech scanning devices. The scanning devices are small and easily concealed. As the criminal walks down the street, through the mall, or in a public place, the scanner collects information from nearby microchips and stores it on a computer. The scanners criminals use employ the same technology found in stores that allow people to "wave" a credit card equipped with a RFID microchip to make a purchase.[2] Criminals have discovered ways to purchase scanners to facilitate these offenses.



Today, many smartphone manufacturers are creating devices that have Near Field Communications (NFC) capability, which is a form of RFID. NFC capability enables smartphones to transmit and receive RFID information. Prior to NFC technology, criminals had to be capable of decrypting the stolen information in order to make it usable. Criminals are now able to download firmware that converts their smartphone into a RFID scanner capable of stealing people's credit card information. Since the firmware also allows the phone to transmit data to scanners, the criminals can then use the stolen information to make fraudulent purchases.[3]

While the chances of someone stealing your information using a RFID scanner are low, it is possible. Additionally, the increasing demand for smartphones and the new technology available on the devices make it more difficult to keep your personal identifying information secure. Maintaining security awareness of new technology is an important step to protect you and your family against identity theft.

RECOMMENDATIONS



- Inspect your cards or contact the issuing company to find out if your card has RFID technology
- If using a card with RFID technology concerns you, request a card without it
- Purchase a storage device designed to protect credit cards, identification, passports, and similar items from RFID scanners
- Place a piece of aluminum foil in your wallet
- Place multiple cards in your wallet so the scanner will have difficulty deciphering the information[4]
- Check your financial statements regularly for any suspicious purchases

These recommendations are provided for your consideration; however, none of them is infallible or can guarantee that your information will not be stolen. Technology is constantly changing and criminals will attempt to find new ways to bypass safeguards created to protect your personal identifying information. You can assist law enforcement by reporting all crimes and suspicious activity to your local police department.

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[1] Piggott, Jim; Mohrmann, Jodi (2014, April 25). How thieves steal credit information without you knowing. News 4 JAX. Retrieved on 11/14/2014 from: http://www.news4jax.com/news/how-thieves-steal-credit-info-without-your-knowing/25553518.
[2] Piggott, Jim; Mohrmann, Jodi (2014, April 25). How thieves steal credit information without you knowing. News 4 JAX. Retrieved on 11/14/2014 from: http://www.news4jax.com/news/how-thieves-steal-credit-info-without-your-knowing/25553518.
[3] Markovich, Matt (2013, May 22). Digital pickpockets using smartphones to steal credit cards. Komonews.com. Retrieved on 11/14/2014 from: http://www.komonews.com/news/local/Digital-pickpockets-using-technology-to-steal-credit-cards-208613001.html.
[4] Pinola, Melanie (2012, March 27). Foil Electoronic Pickpockets with aluminum Foil or Multiple Credit Cards. Lifehacker.com. Retrieved on 11/14/2014 from: http://lifehacker.com/5896785/foil-electronic-pickpockets-with-aluminum-foil-or-multiple-credit-cards.