Electronic Carjacking

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- A year later, independent investigation placed the blame on drivers and mechanical defects, not electronics.
- A team of researchers used this opportunity to publish their findings on the security of vehicle electronics.
...And?

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2. "PassThru" devices that serve as an interface between this port and Windows-based machines.
4. Playing corrupted music files in the CD player.
Wait, CDs?

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- Modern vehicles can have 70 or more different Electronic Control Units (ECU).
- These all communicate over a special networking system known as a Controller Area Network (CAN).
- When compromised, it can grant full control over every electronic system in the car.
Why so vulnerable?

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- Many of the interfaces between ECUs are custom-built, and use unsafe C functions like strcpy.
- Programs like telnetd, ftp, and vi still installed in the OS of some PassThru and Bluetooth devices.
So...when can we panic?

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- It took 10 of them nearly 2 years to develop these exploits for one brand of car.
- Vehicle software often differs based on manufacturer and model.
- Because of this, attacks aren’t necessarily cost-effective at the moment.
Down the road...

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- Some systems should only work if the user is physically in the car.
- Inbound cellular connections don’t need data transfer.
- Every news story I found said that the industry is working on this.
Questions?


http://www.technologyreview.com/computing/35094/?ref=rss&a=f
http://blogs.discovermagazine.com/80beats/2011/03/16/scientists-can-now-wirelessly-hack-your-car/


http://en.wikipedia.org/wiki/CAN_bus