# A Simple Explanation of Hardware Wallets, How They Work with Yoroi, and Why They Are Important to Keep My ADA Safe

emurgo.io/en/blog/hardware-wallet-explanation-yoroi-keep-ada-safe





Physically storing assets in a secure way has been done for thousands of years and has been a lucrative business for enterprises specializing in custodial services. In modern times we may use vaults, safes and hiding places to store our valuable physical assets. Hardware wallets are the physical equivalent to these methods of security for cryptocurrency assets. They allow any ADA holder to take something digital (the coins that exist on the Cardano blockchain) and pair them with a physical item that is secure and protected, giving precious peace of mind to the holder. Crypto hardware wallets are flexible, easy to use and simple and thus, very popular with users. They are a great way for ADA holders to send and store ADA. But what exactly is a crypto hardware wallet, and what are their benefits relative to other forms of storage? In this post, we'll look at how hardware wallets benefit holders of cryptocurrencies like Cardano ADA.

# Why Are Hardware Wallets Important?

Hardware wallets are important because they keep your precious digital funds secure. Hardware wallets are secure because the private key you own never leaves the device and gives the user full control over the private key. A private key is like a digital signature for signing a transaction. This is in contrast to wallets where the private keys are stored online, often with third parties such as exchanges. There have been examples of users losing cryptocurrency digital funds where assets were stored on websites that claimed to offer cryptocurrency custodial services. On these platforms, large numbers of private keys for users' assets fell into the hands of third parties. In this type of scenario, a cryptocurrency user is essentially trusting an unknown or known third party to safely store their funds. However, by using a hardware wallet, you are in complete ownership of your own private keys and funds.

A hardware wallet doesn't actually hold Cardano's native cryptocurrency, ADA. The ADA cryptocurrency always

remains on the Cardano blockchain. It cannot be anywhere other than the blockchain, easily tracked through blockchain explorers like the EMURGO-developed <u>Seiza Cardano Blockchain Explorer</u>.

What we call a hardware wallet is actually an interface with the Cardano blockchain. It contains the private key that allows you to unlock and control the ADA that you own. Your private key (which only you should know) allows you to send ADA in a secure way, while your public key (which anyone can know) allows you to receive ADA also in a secure way.

Your public key can be seen as like a public email address, a public address for people to send messages to you, and your private key is like the password to your public address which should grant access only to you.

An Example Of A Secure Hardware Wallet: EMURGO-developed Yoroi & Ledger Nano S



 $\underline{https://emurgo.io/en/blog/update-cardanos-ada-now-supported-by-ledger-nano-s-integration-with-yoroi-wallet-available}$ 

<u>Yoroi Wallet</u>, a Cardano ADA light wallet developed by EMURGO, now supports the highly popular Ledger Nano S hardware wallet. EMURGO led the integration of Cardano ADA & Yoroi Wallet with Ledger Nano Wallet earlier this year.

This hardware wallet only contains a screen, two buttons, and gives users the ability to sign transactions with their private key. This keeps the process extremely simple and secure.

This EMURGO tutorial walks you through how to connect Yoroi Wallet with your Ledger Nano S.



https://youtu.be/YwdBLh7qAsI

The hardware wallet device looks like a small USB. Once you connect it to your computer, the hardware wallet becomes the only way for an ADA holder to sign for transactions. If you'd like to send some ADA to someone else. the transaction is pushed to the hardware wallet for your approval. When the amount on the screen matches the amount you'd like to send, the next action is simply approving the transaction on the hardware wallet. Once the transaction is signed (approved) by you, the transaction is sent to the Cardano network. For full instructions on how to get started with your Yoroi wallet and Ledger Nano S, check out the post here.

# What Happens If You Lose Your Crypto Hardware Wallet?

What happens to your ADA funds if you lose or damage your hardware wallet? As mentioned, no ADA is stored on the wallet itself, only the private key that grants you access to your funds on the blockchain. Recovering funds is simply a matter of recovering your private key. This is done by entering a combination of words (recovery password/sheet) that are presented to you when you first start your device. These words should be kept secret at all times, as they allow you to recover your private key even if you lose your hardware device. Some choose to keep their recovery password/sheet in a physical vault or elsewhere to make sure it is accessible only by themselves.

### Conclusion

In conclusion, a hardware wallet is a valuable investment for peace of mind and security. For Cardano, the first, thirdgeneration blockchain to emerge from a scientific, peer-reviewed philosophy, the ADA cryptocurrency is fully compatible with Ledger Nano S hardware wallet through our EMURGO-developed Yoroi Wallet. ADA holders can enjoy full ownership of their private key through combining Yoroi Wallet with Ledger Nano S, ensuring that funds remain safe and secure.



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EMURGO drives the adoption of Cardano and adds value to ADA holders by building, investing in, and advising projects or organizations that adopt Cardano's decentralized blockchain ecosystem. EMURGO leverages its expertise in blockchain R&D as well as its global network of related blockchain and industry partners to support ventures globally.

EMURGO is the official commercial and venture arm of the Cardano project, headquartered in Singapore, with a presence in Japan, the USA, India, and Indonesia. EMURGO works closely with IOHK and The Cardano Foundation to grow Cardano's ecosystem globally, and promote its adoption. Learn more about the project at <a href="https://emurgo.io">https://emurgo.io</a>

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# **About Yoroi Wallet**

· Yoroi Twitter: <u>@YoroiWallet</u>

· Yoroi Homepage: <a href="https://yoroi-wallet.com/">https://yoroi-wallet.com/</a>