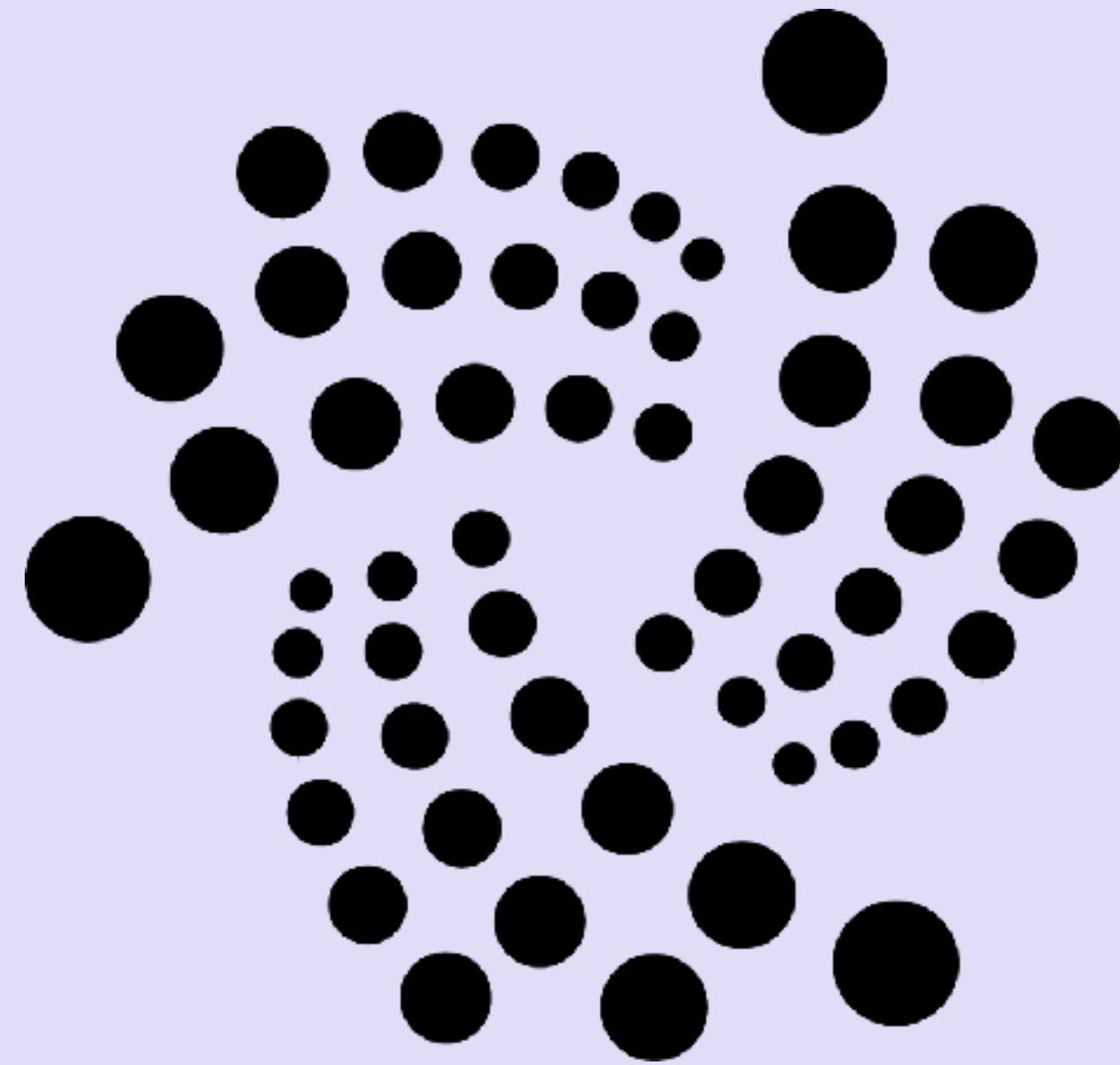


# IOTA TUTORIAL 3 I

## IOTA Trinity Desktop Wallet & Ledger Nano S



# INTRO

- In this tutorial I will demonstrate how the Ledger Nano S can be used with the IOTA Trinity Desktop wallet.

# LEDGER NANO S

- The Ledger Nano S is a hardware wallet that is used for the storage of private keys and seeds of popular cryptocurrencies like Bitcoin, Ethereum, IOTA, etc.
- The seeds and private keys are generated by this wallet and the transactions are signed inside this wallet. This means the seeds and private keys never leaves this wallet.
- The company Ledger is founded in 2014, and they provide security and infrastructure solutions for cryptocurrencies and blockchain applications. They are headquartered in Paris, Vierzon and San Francisco.
- More information about the Ledger Nano S can be found at:  
<https://www.ledger.com>



# BUYING LEDGER NANO S

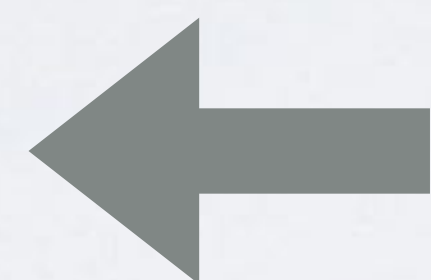
- If you buy a Ledger Nano S always buy it from a reputable seller.
- The box containing the Ledger Nano S comes without a plastic wrap and no tamper proof seal.
- Make sure the hardware wallet is not tampered with.  
Check for obvious scratches or marks!  
If so, contact your seller.
- Make sure the recovery sheet is blank and is NOT pre-filled with 24 words.  
If so, contact your seller.  
**NEVER EVER USE THESE PRE-FILLED 24 WORDS!**

# BUYING LEDGER NANO S

## MY RECOVERY PHRASE

A list of 24 words will be displayed on your device when it is initialized. Make sure to copy each word below, it is a full backup of your accounts and configuration.

- |           |           |
|-----------|-----------|
| 1. _____  | 13. _____ |
| 2. _____  | 14. _____ |
| 3. _____  | 15. _____ |
| 4. _____  | 16. _____ |
| 5. _____  | 17. _____ |
| 6. _____  | 18. _____ |
| 7. _____  | 19. _____ |
| 8. _____  | 20. _____ |
| 9. _____  | 21. _____ |
| 10. _____ | 22. _____ |
| 11. _____ | 23. _____ |
| 12. _____ | 24. _____ |



Make sure the recovery sheet is blank.

# LEDGER NANO S

- The Ledger Nano S with micro USB cable (length = 1m)



- In this picture the Bitcoin and IOTA apps are installed. By default no apps are installed on the Ledger Nano S.



# CREATE PIN CODE & RECOVERY PHRASE

- Connect the Ledger Nano S to your computer and configure it as a new device.
- Enter a pin code (recommended 8 digits) and confirm the pin code.
- The device generates a random 24-word recovery phrase. Write down these 24 words in correct order on the recovery sheet and confirm these words.
- These 24 words are randomly chosen from a list of 2048 words, see:  
<https://github.com/bitcoin/bips/blob/master/bip-0039/bip-0039-wordlists.md>
- **It is very important to write down these 24 words correctly!**  
Some of these 2048 words only differ one character, for example: aim - air, blue - blur, box - boy, etc.

# RECOVERY SHEET

- Safely store the recovery sheet.
- With this recovery sheet, the seeds and private keys can be restored on the same Ledger Nano S or on another Ledger Nano S.  
The pincode does not need to be the same.
- The Ledger Nano S can always be reset, which means all data will be wiped from the Ledger Nano S. After a reset the seeds and private keys can be restored using the recovery sheet.  
If the pincode is entered 3 times wrong, the Ledger Nano S resets itself.
- **IF YOU LOSE THE RECOVERY SHEET YOU LOSE ACCESS TO ALL YOUR FUNDS.**




# LEDGER LIVE APP


- Goto <https://www.ledger.com>, download and install the Ledger Live app.
- Use the Ledger Live app and install on the Ledger Nano S:
  - Firmware version 1.4.2 or newer
  - IOTA app

# FIRMWARE VERSION & IOTA APP

**MENU**



- Portfolio
- Send
- Receive
- Manager**
- Buy/Trade


**ACCOUNTS (0)** 

Press this button to add accounts to your portfolio 


## Manager



Install or uninstall apps on your device



 **Ledger Nano S**   
Firmware version 1.4.2




### App catalog

 Search app

 **Bitcoin**  
Version 1.2.10 Install 

 **IOTA**  
Version 0.4.1 Install 

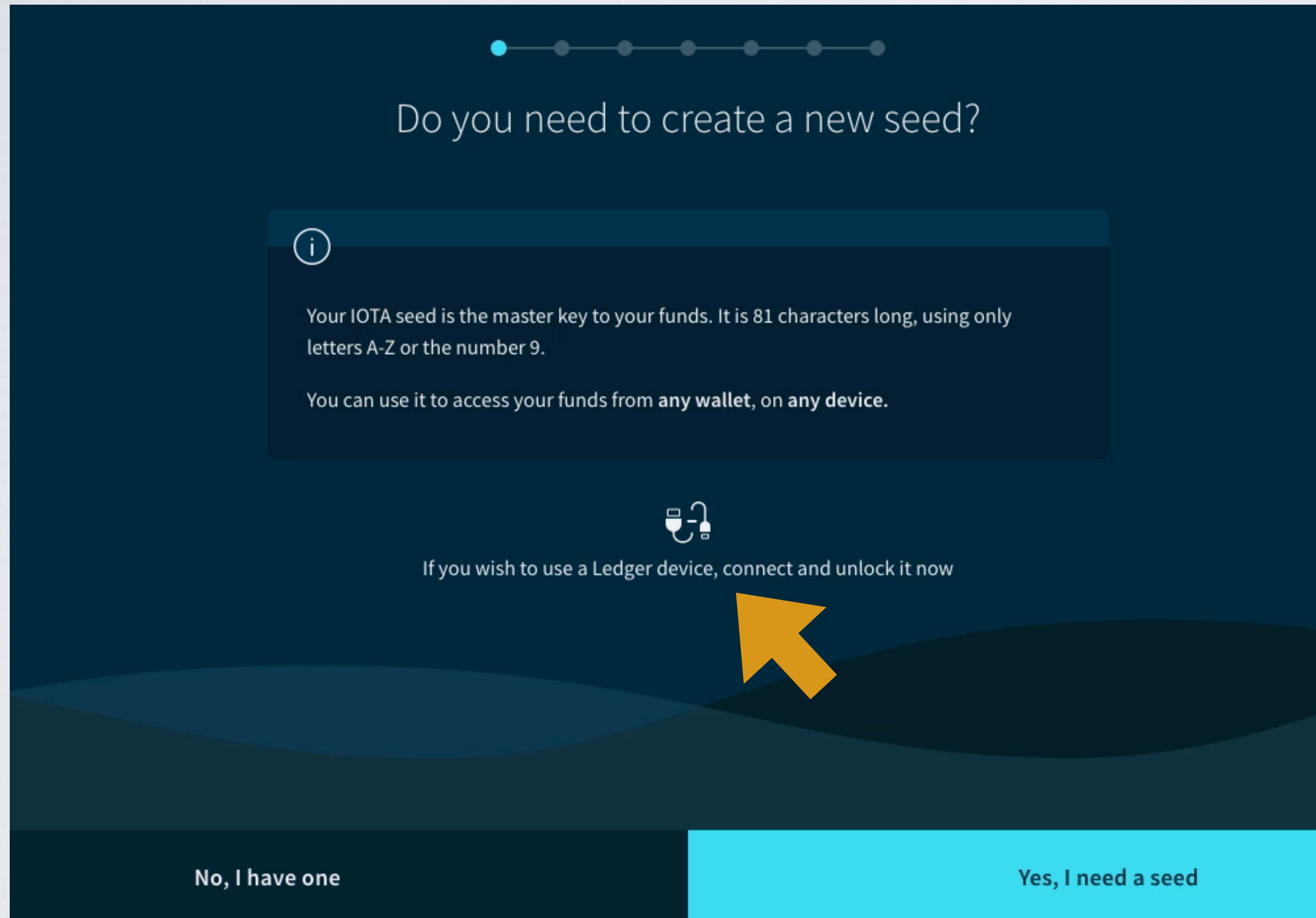


# TRINITY DESKTOP WALLET

- Goto <https://trinity.iota.org>, download and install the Trinity Desktop Wallet.
- This video is made in Nov 2018, the Trinity Desktop Wallet used in the video is a BETA version.
- Install version 0.4.0 or newer.



# TRINITY DESKTOP WALLET



Startup the Trinity Desktop Wallet and follow the instructions.

Use the Ledger device with the Trinity Wallet.

# TRINITY DESKTOP WALLET

- When you use the Ledger device with the Trinity Wallet, the seed can not be viewed. The seed is not stored in the Trinity wallet.

