

Using Bots for Crypto Arbitrage: How It Works

October 03, 2026 · Document #403 · bip39-pharse.com



Photo by [Art Rachen](#) on [Unsplash](#)

Crypto arbitrage involves exploiting price differences for the same asset across different exchanges. Because cryptocurrency markets operate across dozens of platforms simultaneously, small price gaps appear constantly. Manual traders cannot react fast enough to capture these gaps reliably, which is why automated bots have become the standard tool for arbitrage in this space.

How Arbitrage Bots Operate

An arbitrage bot continuously monitors prices on multiple exchanges through API connections. When the bot detects that Bitcoin, for example, is trading at \$62,400 on Binance and \$62,550 on Kraken, it executes a buy order on the cheaper exchange and a sell order on the more expensive one simultaneously. The entire process can complete in milliseconds. Most bots are configured with threshold parameters, meaning they only trigger trades when the price gap exceeds a minimum percentage that covers transaction fees and still generates profit.

There are several arbitrage strategies bots commonly use. Simple or spatial arbitrage compares prices across two exchanges. Triangular arbitrage works within a single exchange by cycling through three currency pairs — for instance, converting USD to BTC, BTC to ETH, and ETH back to USD — to profit from pricing inefficiencies between the pairs. Statistical arbitrage uses historical price correlations between assets to identify when two related coins have diverged beyond normal ranges.

Key Technical Requirements

Running an effective arbitrage bot requires low-latency infrastructure. Colocating servers physically near exchange data centers reduces execution delays. Bots written in low-level languages like C++ or optimized Python with asynchronous request handling respond faster than those built with general-purpose frameworks. API rate limits imposed by exchanges also constrain how frequently a bot can check prices and submit orders, so developers must account for these restrictions in the bot's logic.

Capital must be pre-funded on each exchange the bot targets. Because arbitrage depends on immediate execution, there is no time to transfer funds between platforms after spotting an opportunity. This means liquidity is split across multiple accounts, increasing both counterparty risk and the complexity of managing balances.

Risks and Real-World Limitations

Slippage is a persistent problem. By the time a bot places a large order, the price may have already moved, erasing the expected margin. During high-volatility periods, spreads can widen unpredictably, but execution speed and liquidity can also deteriorate sharply. Exchange downtime or API failures mid-trade can leave a position partially filled on one side, creating unintended exposure.

Regulatory risk is also relevant. Some jurisdictions classify high-frequency automated trading as requiring specific licensing. Additionally, exchanges may flag or ban accounts they identify as running aggressive arbitrage strategies that strain their systems.

Despite these challenges, arbitrage bots remain profitable for well-capitalized operators with technical expertise. The margins per trade are typically thin — often fractions of a percent — so high trade volume and tight cost control are essential. For retail participants with limited capital, the fees and infrastructure costs frequently outweigh the gains.

ENTROPY-GENERATED WORD LISTS

The following pages list 78 example seed phrases assembled from the 2048-word BIP39 dictionary.

- | | |
|--|---|
| 1) axis chapter short visa oak napkin
embody federal warfare deliver flush
exist | 2) alley adapt super corn damp benefit
fabric mix frequent melody tiger venue |
| 3) bargain large shed dragon seek
tongue away disorder mushroom border
resemble walnut | 4) cart airport loan awful sort camera
length trash curtain tomato blind
tonight |
| 5) repair border barrel kiwi alter
chapter canvas bridge hard sting forum
castle | 6) please misery file farm attract
apology click finish mosquito file
picnic dial |
| 7) pond amused decline actress rely
congress stumble chicken will junior
jaguar wagon | 8) onion exercise medal snake boil
fever black there pull flag spider
floor |
| 9) code despair modify chunk basket
entire innocent dumb trade zone odor
tired | 10) supply ritual cause liar demand
obey amount dilemma bleak gun adapt
output |
| 11) crazy resist flag ball genre
depend mixture crater critic ten
chapter fringe | 12) pelican erupt zero couch test key
hawk sunny worth follow toe apple |
| 13) end slab torch swim banner act
gloom vessel joy artist wall transfer | 14) south plunge spawn stomach blade
ring caution swarm much escape mom
cinnamon |
| 15) badge popular junk will arctic hip
coil problem narrow happy history
stomach | 16) talent oyster inside unusual thumb
warm link army jelly thing scrub drama |
| 17) sample other income number reform
expand style roof rib smart alarm
kitten | 18) parrot runway syrup sustain net
accuse reform sun return coffee pig
absorb |
| 19) twin dinner clerk husband unfair
diet morning copper coconut present
gadget false | 20) hold clean clog west desk disease
later car lamp benefit sock puzzle |
| 21) clog arrest physical funny birth
addict little vintage indoor credit
venue shuffle | 22) vehicle tumble soul lumber gauge
voyage next layer crucial swarm any
addict |
| 23) green hour veteran once sea
electric icon shy mirror multiply
praise grape | 24) merge lucky tissue army parrot
bachelor hover tray seven faint return
nominee |

— Part 3 of 6 —

ENTROPY-GENERATED WORD LISTS

25) large drift enhance foster crash
kiss current tone load cargo second
gap

27) spin assume embark depend student
dust helmet grace vessel clip record
idea

29) black assist song submit wrap
goddess office modify fall fiber
obscure matrix

31) alpha drift dutch front evoke
employ paddle ankle fetch atom answer
gate

33) crash vault stem sail dove version
fiscal laundry basic faith noodle
decline

35) tuition point type behave tribe
usage sport zone cream picture forget
cover

37) stomach split minimum purchase
merit leg height elite people truck
deliver vague

39) approve clerk post transfer begin
pyramid unknown success aspect grain
shine jealous

41) clarify galaxy cube hero gown
fabric pencil friend shoulder sock
govern evidence

43) wrong cabin aim train primary code
tone require forget umbrella palace
holiday

45) blossom act aim human quick enrich
nerve tiger gift half swarm avocado

47) measure smoke history safe start
father kid struggle garlic expose safe
plug

49) thing damp into urban october
cable test switch swim throw snow
divorce

51) tenant voyage snack result bag
express seek pistol script skate tree
random

53) double soldier emerge blue fluid
update moral market crazy analyst
enforce wing

26) critic aspect adjust tennis weird
evoke fame echo inhale cat comic knock

28) surprise grab grid visit decrease
much tower trash hub steel parade
runway

30) best butter diet congress author
pepper pepper swing win owner apple
extend

32) govern type half asset cloud apart
pave kidney open wear deposit reveal

34) follow raw dizzy piece lock still
useless senior bus hamster maple
sentence

36) alter rack sustain scare island
yard ranch vault relax speak basic
inform

38) forget cat fold credit suit birth
weasel gather choose tool acoustic air

40) awake near mix bleak bean garment
place install end venue kit stock

42) ready trick mammal dutch extend
age diet crane coyote develop either
sadness

44) sound heart moon invest permit
peanut eager remain guard duty sound
husband

46) column zone keen agree tissue bike
scan helmet dry hard predict come

48) soldier meadow purse quarter truth
knock pill junk genius rare twenty
speak

50) later tube collect proud close
theme true hen noodle tube rally maple

52) tag comic real unable mistake
evolve also crack dwarf help keen flat

54) step violin taste elephant asset
knife village connect crawl issue bike
grief

— Part 4 of 6 —

ENTROPY-GENERATED WORD LISTS

55) ability vacant drive flip hurdle
recycle salute smooth ramp sphere
advance captain

57) brown dream era cheap method
escape level mouse input cheese waste
cushion

59) horse unknown pass novel lion
solar giggle nation wreck afford day
flee

61) daughter host amazing scrub manage
minor salute column surprise sample
banana surround

63) milk mean lava birth monkey census
carpet among situate disagree drama
range

65) tonight fringe sure sorry ability
lonely scissors foster cactus blanket
describe recipe

67) suit awesome brave veteran voyage
deposit crazy cruise decade polar
artefact insect

69) kiwi sunset glory vanish kidney
talk depth cereal stem confirm street
shrug

71) rebuild combine render enrich
finish cannon feel kingdom elder eager
practice during

73) vintage sponsor motion become
monster order term strong outer rubber
tiny deputy

75) weasel air name measure much
airport foot quality can journey dizzy
harvest

77) sunny property gap field orphan
draw hollow anger castle ensure feel
culture

56) mixture brief symbol art medal
stumble wrong right room medal public
answer

58) rely oven tower point square crisp
season eagle grunt swarm employ
upgrade

60) couch brass man spatial number
share moral round mixed boat win march

62) hollow bamboo husband gravity
phrase wool test afraid divorce human
resource jump

64) reject element have garment
collect capable creek roast tuition
dilemma zebra demand

66) great image foot dance roast
cousin together oak frown harsh trust
misery

68) nephew hurt excite legend build
casual crouch away student rural scrap
excuse

70) crash eagle runway coffee gossip
deputy meat runway beach heavy tray
kangaroo

72) lawsuit radar violin habit crane
taste destroy response drop capable
turn ecology

74) expose guess amateur seat now live
mass elegant place regular rotate rug

76) craft fine luxury weasel wrist
lunch expire tomorrow indicate decide
chalk absent

78) rally unhappy slab rude hospital
pluck pact jump virus kite reason
junior

SEE ALSO

- [Crypto Arbitrage Trading Strategies — BIP39 Seed Phrases \(May 08, 2026\) \(2026-05-08\)](#)
- [How Decentralized Exchanges \(DEXs\) Work — BIP39 Seed Phrases \(March 31, 2026\) \(2026-03-31\)](#)
- [Technical Analysis Basics for Crypto Traders — BIP39 Seed Phrases \(April 16, 2026\) \(2026-04-16\)](#)
- [An Introduction to Crypto Derivatives — BIP39 Seed Phrases \(April 21, 2026\) \(2026-04-21\)](#)

Educational examples only. Randomly generated, not valid wallet phrases - never use them to store funds. Details: bip39-phrase.com/security/
— Part 6 of 6 —