

## CryptoHelper Guide

Thanks for your interest in CryptoHelper! Below are some starting tips and information to help you get started with the tool.

### **IMPORTANT - RISKS - READ ME FIRST!**

Please understand that while arbitrage is free from market risk, the type of arbitrage you choose to do can still result in losses due to volatility in the price.

You can lose money if the exchange prices change before you transfer the funds over, and you can also lose money if you do not check that the wallets are enabled for a certain exchange.

Let me repeat that:

**ALWAYS DOUBLE CHECK TO SEE AN EXCHANGE'S WALLETS ARE NOT DISABLED.  
ALWAYS DOUBLE CHECK TO SEE THE COIN'S NAME MATCHES ON BOTH EXCHANGES.  
ALWAYS TRY TO CHECK THE CONFIRMATION TIME BETWEEN COINS.**

**In my experience exchanges like Poloniex or Yobit or Cryptopia are usually culprits of this. Coins with lower volume on coinmarketcap are also susceptible to this. For example, ICN can stand for both Iconomi and iCoin. BE CAREFUL.** If you see a profit of over 5% usually you should be wary, unless a pump has just happened and the exchanges are lagging.

Currently I have decided to not blacklist pairs that are misnamed, as there might be opportunities in the future as they are listed. Depending on user feedback, I may change this.

I am not liable for any losses incurred using this tool.

### **Frequent Issues:**

#### **I can't find any arbitrage opportunities!**

Don't try to look for major pairs, like BTC/USD, or ETH/BTC, or LTC/BTC. These pairs are way too crowded for proper arbitrage. You'll find a lot more opportunities with smaller altcoins, with less than 50 BTC 24H trading volume.

## **All the good arbitrage opportunities have wallet maintenance!**

Yes, if the profit percentage is greater than 5% it should raise red flags. There's a reason why that discrepancy exists. In any case, this tool is not meant for you to take on super large arbitrage opportunities as most of these are due to some sort of maintenance. ~5% ROI daily is very good anyways compared to any other investment.

### **Does this tool account for fees?**

I currently have a disabled version of fee checking in - the problem is that for most of these exchanges your fee actually varies based on your trading volume. An easy workaround for this is to just set a base profit percentage - if I put 0.5% profit percentage you usually break even with fees, so you should just put something higher than that.

### **What are good settings?**

Generic settings that I like to use is 0.01 profit, 1% profit percentage. This gives you decent opportunities that are worth your time.

### **I'm worried that the prices will change when I transfer the coins.**

This is an inherent risk in arbitrage - to help mitigate this there are several ways you can give yourself some peace of mind.

1. Since we're dealing with low volume altcoins here, most of the coins shouldn't move that much before you transfer your portion over.
2. You can check confirmation times on most exchanges - for example Cryptopia shows you the number of confirmations needed here:  
<https://www.cryptopia.co.nz/CoinInfo>
3. You can try other arbitrage techniques. If you're able to short sell, you can buy an altcoin on the cheaper exchange and short sell on the higher one. You will make profits as the coin moves around. You can also try holding altcoins that you see frequent spreads at, then you buy and sell instantly from the two exchanges and rebalance later.

## The profit and profit percentage don't seem to match the spread!

This is due to the fact that orderbook volume matters. I show you the highest bidding price and lowest asking price for your convenience - it's not as simple as subtracting the two to determine your profit. The simple example you may consider: someone is selling 5 ETH for \$10 and someone is buying 5 ETH for \$20. Your profit here is as expected, \$50 from  $5 * (\$20 - \$10)$ . However, this is pretty much never the case live.

In a live environment, you will have  
someone selling 1 ETH for \$10  
someone selling 2 ETH for \$11  
someone selling 2 ETH for \$12

And then on the other side,  
someone buying 1 ETH for \$15  
someone buying 2 ETH for \$14  
someone buying 2 ETH for \$13

Your true profit here is then  
 $(\$15 + 2 * \$14 + 2 * \$13) - (1 * \$10 + 2 * \$11 + 2 * \$12) = \$13$

Had you naively done the calculations, you may have concluded that your profit was  
 $5 * (\$15 - \$10) = \$25$

Which is clearly not correct. My tool does all this calculation for you so you don't need to worry about the accuracy of the profits.

### Inputs:

**Base pair** - This is the base currency, or currency you have most of your holdings in.

**Enter a series of coins** - Enter the coins you want to reference here.

**Minimum profit** - Enter the minimum profit you want to make in your base currency, so if I have BTC selected, a value of 0.1 means I would want to only see opportunities with greater than 0.1 BTC.

**Minimum profit percentage** - Enter the minimum profit percentage you would like to earn.

**Minimum volume** - Enter the minimum volume you would like to use. This means how much BTC you would want to use to make the trade. For example, I might find an opportunity with 100% profit return, but if only 0.001 BTC is being used, I can only earn up to 0.001 BTC on top of my initial investment. You can set this higher so that the opportunities shown are worth your time.

**Select some exchanges** - Any exchanges selected will be used in the comparison.

**Select which mode to use** - The two modes offered right now are arbitrage and orderbook.

Arbitrage is the traditional arbitrage mechanism, where say exchange A is selling a coin for \$0.01 and exchange B is buying a coin for \$0.05. You can buy from A and sell at B.

Orderbook mode is when there are no arbitrage opportunities and you would like to try to make your own. Orderbook mode allows you to compare bid prices at two exchanges. Once an opportunity is found, go to the exchange with the lower bid price and outbid the highest bidder by one satoshi, or (0.00000001) BTC. If someone sells to you, then you can move your funds and sell them off to the other exchange.

## Table Results:

Pair	Profit	% Profit	Total volume	Buy from	Buy price	Sell to	Sell price	Refresh
XVG	0.049	5.654%	0.865	<a href="#">Bittrex</a>	0.00000105	<a href="#">Cryptopia</a>	0.00000113	<a href="#">Refresh</a>

**This means that I can buy the XVG pair from Bittrex and sell at Cryptopia for a profit of 0.049. It will take 0.865 to buy out all the volume, thus making a profit of 5.654%. This does not factor in fees.**

**If nothing shows up, it means there were no results to be found.**

**Pair** - Tells you the name of the checked currency.

**Profit** - Tells you in the base currency how much profit is to be made if you were to trade the entire orderbook.

**% Profit** - Tells you how much % profit you would make investing **Volume** amount of your base currency.

**Total Volume** - Tells you how much in your base currency you would need to squeeze all the profit from this opportunity (remember: the tool will run a simulated buy/sell to see how many orders you could buy and fulfill based off of the orderbook volume). This means if you wanted to,

you would buy out 0.865 BTC of the asks from the lower exchange and sell the equivalent amount to the higher one. I typically would advise you against buying the exact volume as prices can change. Leave some buffer room for yourself.

**Buy from** - Tells you which exchange to buy from. Click on the exchange to be directed to the charts of the currency (there are a few exchanges which do not offer that functionality, so it will just link you to the exchange site).

**Buy price** - This is the lowest price at which you can buy from the exchange.

**Sell to** - Tells you which exchange to sell to. Click on the exchange to be directed to the charts of the currency (there are a few exchanges which do not offer that functionality, so it will just link you to the exchange site).

**Sell price** - This is the highest price at which you can sell to the exchange.

**Refresh** - After you have results and pinned down a pair, you can refresh it to ensure the opportunity still exists.