

# **Simple Guide to NinjaTrader Strategies** generated by StrategyQuant

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# **Getting started**

This quick manual doesn't replace the program Users Guide, it only explains the parameters used in generated strategy. Please refer to Users Guide first to correctly install everything needed to run NinjaTrader strategies.

## Post-installation steps

Please check this section in Users guide, there are some important post-installation steps that you need to do in order to make your new StrategyQuant strategies run in NinjaTrader.

#### NinjaTrader strategies

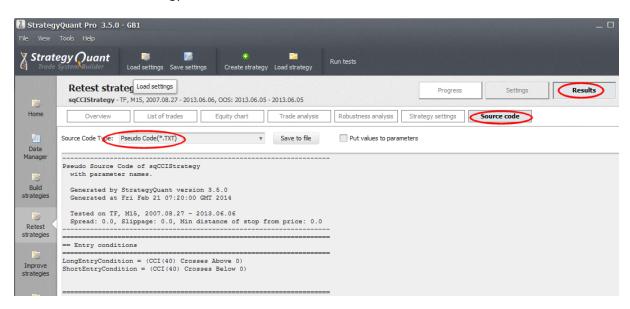
NinjaTrader strategies generated by StrategyQuant come in full source code, you can check their trading logic or edit them if you want.

There are a number of fixed parameters that define the strategy behavior, plus there can be additional parameters that hold values of indicator periods, stop loss, etc.

#### How to get strategy source code

Simply double click on the strategy in databank (on the bottom) and it will open your strategy in Results. There go to Source code tab and you'll see the code of your strategy. You can switch to different export codes.

If you want to understand the strategy trading logic choose **Pseudo code**. This is human readable code that describes strategy rules.



To use the strategy in NinjaTrader you should choose **NinjaTrader code**. You can then copy & paste this strategy to NinjaTrader and test or run it there.

#### **Parameters**

By default the strategy contains parameters for trading logic, etc. If you want to make also other strategy parameters configurable check the checkbox Put values to parameters in Source code tab:



#### 1.1 Strategy Parameters

These parameters are either StopLoss/ProfitTarget parameters or periods of indicators used, coefficients, etc.

All non SL/PT parameters have name like pXXX\_number, for example pATR\_1, and they hold the parameters of indicators or number coefficients used in the strategy. Every indicator parameter has its own variable.

#### Stop Loss/Profit Target Parameters

these parameters are used to set up SL/PT levels

#### LongStopLoss, LongProfitTarget, ShortStopLoss, ShortProfitTarget

here you can set stop loss or profit target for both sides (long and short) in ticks.

#### $Long Stop Loss Coef, \ Long Profit Target Coef, \ Short Stop Loss Coef, \ Short Profit Target Coef$

stop loss or profit target can have fixed value in ticks, or it can be based on ATR, which means that it is defined as:

StopLoss/ProfitTarget = coefficient \* ATR(period)

In this case strategy will contain also parameters for these coefficients.

#### Move to Break Even Parameters

These parameters are used to move SL to a break-even (trade open price) when price reaches a predefined profit.

#### LongBreakEvenAtTicksProfit, ShortBreakEvenAtTicksProfit

set the profit level after which the SL should be moved to open price. If strategy uses ATR-based break even, these values are set to 0.

#### LongBreakEvenAtTicksProfitCoef, Short BreakEvenAtTicksProfitCoef

just like with normal SL/PT, also break-even rule can be ATR-based instead of fixed. If strategy has ATR-based break-even rule, it will have these coefficient parameters.

And again, just like with SL/PT, if you set LongBreakEvenAtTicksProfit to non-zero, you will override the settings of LongBreakEvenAtTicksProfitCoef and the strategy will use fixed ticks break-even.

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#### **Trailing Stop Parameters**

These parameters are used for setting up the trailing stop.

#### LongTrailingStopTicks, ShortTrailingStopTicks

set the trailing stop in fixed ticks value. If strategy uses ATR-based trailing stop, these values are set to 0.

#### $Long Trailing Stop Ticks Coef, \ Short Trailing Stop Ticks Coef$

just like with normal SL/PT, also trailing stop can be ATR-based instead of fixed. If strategy has ATR-based trailing stop rule, it will have these coefficient parameters.

### Stop/Limit Order Price Parameters

stop/limit order in StrategyQuant always has a form:

stop/limit price = price + coefficient \* price\_range

The stop/limit price is computed in the function getTradeOpenPrice(), what you can configure is the coefficient parameter.

#### LongPriceCoef, ShortPriceCoef

coefficient for stop/limit price for long or short order

#### LongExpirationAfterBars, ShortExpirationAfterBars

stop/limit orders are set to be valid only specified amount of time. Here you can set up how many bars they will be valid. After this period the stop/limit order will be cancelled.

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#### 1.2 Time Parameters

These parameters allow you to restrict trading to a specific time of the day

#### LimitSignalsToRange

set true to limit trading to a defined range

#### TradingRangeFrom, TradingRangeTo

definition of trading ranges in HHMM format (for example 0800 or 1245)

#### 1.3 Trading Logic Parameters

these are various parameters that define strategy behavior

#### MinimumSLPT, MaximumSLPT

here you can set minimum and maximum SL/PT in ticks. It will override all other settings; your SL/PT will never be bigger or smaller than this.

The only exception is if your strategy doesn't contain SL/PT at all, then the trade exit is managed by strategy and it is not defined how big the SL/PT will be.

#### MaxTradesPerDay

maximum trades per day, 0 means unlimited

#### PendingOrderValidOneBar

if set to true, your pending orders will be valid for one bar only. They would have to be resubmitted on every bar to be valid.

If you set it to false, pending orders are valid until they expire or until they are cancelled.

#### ReplacePendingOrders

if set to true, your active pending order will be replaced if a pending order to the same direction with different price is entered.

If it is false, the pending order is not replaced by newer one until it expires or is cancelled.

#### StrictStopPrices

there are normally constraints for placing stop/limit orders. For example you can enter long stop order only above the actual price, and short stop only below actual price.

if you set StrictStopPrices=true, it will use this standard behavior, refusing orders with price levels outside these constraints.

If you set it to false, it will check if the stop order price is correct and if for example you want to enter to long stop below actual price it will instead enter at Market.

So setting StrictStopPrices to false will allow your orders to enter at market if the price already went above the allowed level.

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# 1.4 Other Important Parameters

there are other standard NinjaTrader parameters that you have to set correctly and that can have impact on strategy performance. They are all described in NinjaTrader help, we'll just mention them here:

Fill Type

Timeframe / Session

**Exit On Close** 

Min bars required

## 1.5 Money Management Parameters

NinjaTrader strategies generated by StrategyQuant currently supports only money management options offered by NinjaTrader in **Order Properties**.