

# **Adaptrade Builder**

for TradeStation

Version 1

# **Bonus Strategies**

Copyright©2010AdaptradeSoftware www.Adaptrade.com

## Disclaimer

HYPOTHETICAL OR SIMULATED PERFORMANCE RESULTS HAVE CERTAIN INHERENT LIMITATIONS. UNLIKE AN ACTUAL PERFORMANCE RECORD, SIMULATED RESULTS DO NOT REPRESENT ACTUAL TRADING. ALSO, SINCE THE TRADES HAVE NOT ACTUALLY BEEN EXECUTED, THE RESULTS MAY HAVE UNDER- OR OVER-COMPENSATED FOR THE IMPACT, IF ANY, OF CERTAIN MARKET FACTORS, SUCH AS LACK OF LIQUIDITY. SIMULATED TRADING PROGRAMS IN GENERAL ARE ALSO SUBJECT TO THE FACT THAT THEY ARE DESIGNED WITH THE BENEFIT OF HINDSIGHT. NO REPRESENTATION IS BEING MADE THAT ANY ACCOUNT WILL OR IS LIKELY TO ACHIEVE PROFITS OR LOSSES SIMILAR TO THOSE SHOWN.

EasyLanguage and TradeStation are registered trademarks of TradeStation Technologies, Inc.

Copyright © 2010 Adaptrade Software www.Adaptrade.com

## **Software License Agreement**

These license terms are an agreement between Adaptrade Software and you. Please read them. They apply to the software named above, which includes the media on which you received it, if any. The terms also apply to any

- updates,
- supplements, including EasyLanguage code files for TradeStation, and
- support services

for this software provided by Adaptrade Software, unless other terms accompany those items. If so, those terms apply.

BY CLICKING ON THE "I AGREE" BUTTON WHERE INDICATED, OR BY COPYING, INSTALLING OR OTHERWISE USING THE SOFTWARE, YOU ACCEPT THESE TERMS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT INSTALL OR USE THE PROGRAM AND DESTROY ALL COPIES OF IT.

If you comply with these license terms, you have the rights below.

- 1. LICENSE MODEL. The software is licensed on a per user basis.
- 2. INSTALLATION AND USE RIGHTS. You may install and use any number of copies of the software on your devices, provided it is for your use only.
- 3. SCOPE OF LICENSE. The software is licensed, not sold. This agreement only gives you some rights to use the software. Adaptrade Software reserves all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. You may not
  - reverse engineer, decompile or disassemble the software, except and only to the extent that applicable law expressly permits, despite this limitation;
  - make more copies of the software than specified in this agreement or allowed by applicable law, despite this limitation;
  - publish the software for others to copy;
  - rent, lease or lend the software;
- 4. BACKUP COPY. You may make two backup copies of the software. You may use these copies only to reinstall the software.
- EXPORT RESTRICTIONS. The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use.
- 6. SUPPORT SERVICES. Support services are as described on the Adaptrade Software web site, www.Adaptrade.com.
- 7. ENTIRE AGREEMENT. This agreement, and the terms for supplements, updates and support services that you use, are the entire agreement for the software and support services.
- 8. APPLICABLE LAW.
  - a. United States. If you acquired the software in the United States, California state law governs the interpretation of this agreement and applies to claims for breach of it, regardless of conflict of laws principles. The laws of the state where you live govern all other claims, including claims under state consumer protection laws, unfair competition laws, and in tort.
    - Outside the United States. If you acquired the software in any other country, the laws of that country apply.
- 9. LEGAL EFFECT. This agreement describes certain legal rights. You may have other rights under the laws of your country. You may also have rights with respect to the party from whom you acquired the software. This agreement does not change your rights under the laws of your country if the laws of your country do not permit it to do so.
- 10. DISCLAIMER OF WARRANTY. THE SOFTWARE IS LICENSED "AS-IS." YOU BEAR THE RISK OF USING IT. ADAPTRADE SOFTWARE GIVES NO EXPRESS WARRANTIES, GUARANTEES OR CONDITIONS. YOU MAY HAVE ADDITIONAL CONSUMER RIGHTS UNDER YOUR LOCAL LAWS WHICH THIS AGREEMENT CANNOT CHANGE. TO THE EXTENT PERMITTED UNDER YOUR LOCAL LAWS, ADAPTRADE SOFTWARE EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.
- 11. LIMITATION ON AND EXCLUSION OF REMEDIES AND DAMAGES. YOU CAN RECOVER FROM ADAPTRADE SOFTWARE ONLY DIRECT DAMAGES UP TO THE AMOUNT PAID FOR THE SOFTWARE. YOU CANNOT RECOVER ANY OTHER DAMAGES, INCLUDING CONSEQUENTIAL, LOST PROFITS, SPECIAL, INDIRECT OR INCIDENTAL DAMAGES.

This limitation applies to

- anything related to the software, services, content (including code) on third party Internet sites, or third party programs; and
- b. claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.

It also applies even if Adaptrade Software knew or should have known about the possibility of the damages. The above limitation or exclusion may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

## **Table of Contents**

i
ii
iii
1
1
1
2 2
2
3
4
4
2 3 4 4 5

## **Bonus Strategies**

## **Overview**

Adaptrade Builder is a powerful software tool that automatically generates trading strategies for TradeStation based on user-specified performance criteria. Using Builder, you should be able to create robust trading strategies for nearly any market. While the true value of Builder lies with its ability to generate strategies based on your custom requirements, a paid license to Builder includes seven bonus strategies that have already been created using the program.

These bonus strategies include two stock index futures strategies, a commodity trading strategy, a forex strategy, an ETF strategy, and two stock trading strategies. These strategies are included in a download file that is provided immediately following purchase of the program.

The rest of this brief document includes instructions for downloading and installing the bonus strategies and a description of each one.

## Installation

The bonus strategies are delivered via download immediately following purchase. The link to the download file will be listed in the purchase receipt from SoftwareKey.com. The download file is a self-extracting installation file with the name "BuilderBonus.exe". To extract the strategies, browse to the location of the downloaded file via Windows Explorer (also known as "My Computer") and double-click on the file to open it. Alternatively, select Run from the Accessories menu under the list of programs in the Start menu, browse to the location of the downloaded file, click Open, then click OK in the Run window. The extraction process should begin.

Before the installation file begins to extract the files, it will prompt you to enter the location to which the files should be copied. It's recommended that you copy the files to the Examples folder in the installation folder for Builder. By default, the Examples folder is located under Program Files in the Adaptrade Software\Adaptrade Builder folder. By copying the bonus files to this location, when you open one of the bonus strategy files, the price data file will be located in the expected location. If you copy the files to a different location, you'll need to reselect the price data files when you open each strategy file.

Once the files have been copied to the location you specified, you should find seven files with the extension ".gpstrat"; for example, Builder-Sample-ES-Daily.gpstrat. These are the Builder files that you can open from within Builder using the Open command of the File menu. Each of these files also has an associated text file of price data with the extension ".csv"; for example, AAPL-daily-15yrs-.csv. You should also find a workspace file for TradeStation with the extension ".tsw" and a TradeStation code file with the extension ".eld". To install the strategies into TradeStation, it's necessary to import them from the .eld file using the Import command of the File menu in TradeStation.

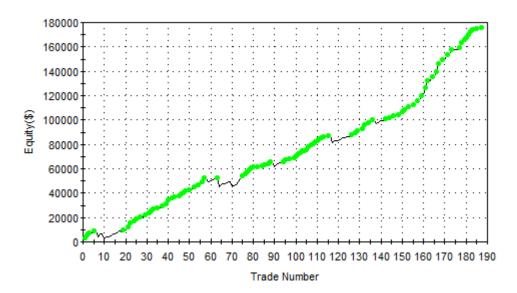
Once the strategies have been installed in TradeStation, you can open the workspace file from within TradeStation. A chart should be visible for each market, and the corresponding strategy should be inserted into the chart.

## **Strategies**

The seven bonus strategies are described below. To open each one, use the **Open** command of the File menu in Builder, navigate to the Examples folder (assuming you extracted the bonus files to this folder), select a file with the extension .gpstrat and click the Open button.

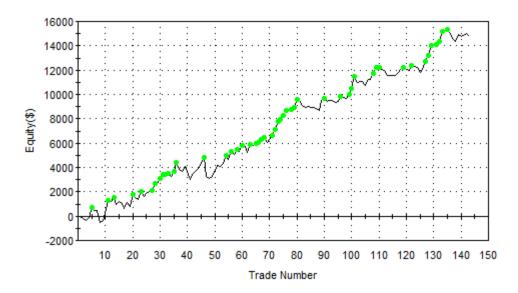
### E-mini S&PStrategies

Two systems were generated for the E-mini S&P 500 futures market (symbol: ES). One system is a day trading system for 5 minute bars, and the other is a system for daily bars that holds trades overnight.



Equity Curve Line - @ESH10.D Daily(03/17/99 13:15 - 03/19/10 13:15)

On daily bars of the ES, Builder was run on data from 3/17/2000 to 3/15/2010, with the preceding year (3/17/99 - 3/17/2000) used for out-of-sample testing. On the optimization sample, the final strategy made \$146,763 on a one-contract basis after \$25 per trade for costs. On the out-of-sample period, it made an additional \$28,925.



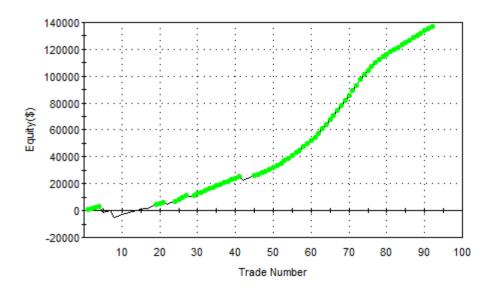
Equity Curve Line - @ESH10.D 5 min.(12/12/08 06:35 - 03/12/10 13:15)

On 5 min bars of the ES, Builder was run on a much shorter time period to accommodate the market's tendency to change more frequently on 5 min bars than on daily bars. The day trading strategy for 5 min bars was built using one year of data from 3/13/2009 to 3/12/2010, with the preceding three months (12/12/2008 - 3/12/2009) used for out-of-sample testing. On the optimization sample, the final strategy made \$12,750 on a one-contract basis after \$25 per trade for costs. On the out-of-sample period, it made an additional \$2,000. With this type of system, you would probably re-build the strategy every few months to keep up with the changing market dynamics of 5 min bars.

### Commodity Futures Strategy

The commodity futures strategy was developed for the mini crude oil market (symbol: QM) using daily bars.

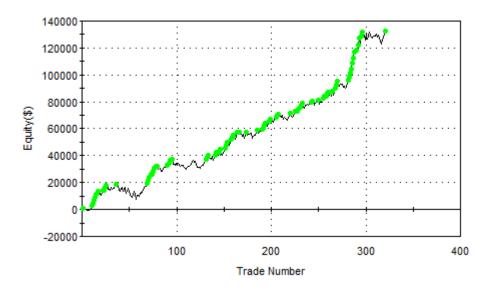
For this market, Builder was run on data from 6/18/2004 to 3/18/2010, with the preceding two years (6/18/2002 - 6/18/2004) used for out-of-sample testing. On the optimization sample, the final strategy made \$133,678 on a one-contract basis after \$25 per trade for costs. On the out-of-sample period, it made an additional \$3,107.



### Equity Curve Line - @QM Daily(06/17/02 14:15 - 03/19/10 14:15)

### ForexStrategy

A foreign exchange rate (forex) strategy was developed for the Euro-US dollar (EURUSD) currency using daily bars. The resulting equity curve is shown below.



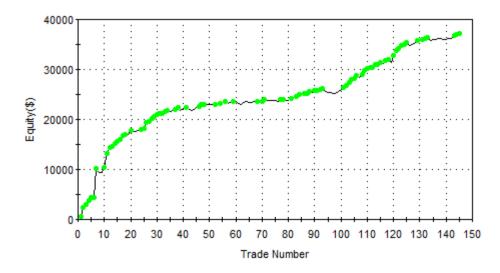
Equity Curve Line - EURUSD Daily(01/05/98 13:59 - 03/18/10 13:59)

The strategy was built on data from 1/6/1998 to 3/17/2009, with the following year (3/18/2009 - 3/17/2010) used for out-of-sample testing. On the optimization sample, the final strategy made \$130,080 trading \$100,000 lots after \$50 per trade for costs. On the out-of-sample period, it made an additional \$2,413.

### **ETF** Strategy

A day trading strategy was developed for the NASDAQ 100 trust (QQQQ) using 60 minute bars. The QQQQ is one of the more popular exchange traded funds (ETFs). The results are shown below.

Equity Curve Line - QQQQ 60 min.(03/17/00 07:30 - 03/17/10 13:00)

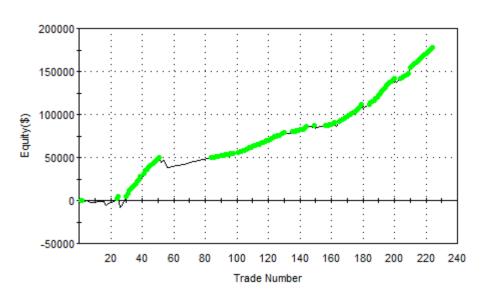


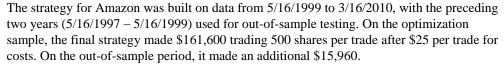
The day trading strategy was built on data from 1/2/2001 to 3/17/2010 with the period from 3/17/2000 to 1/2/2001 used for out-of-sample testing. Trading 1000 shares per trade with \$25 per trade for costs, the strategy made \$27,470 on the optimization sample. On the out-of-sample period, it made an additional \$9,490.

### Stock Strategies

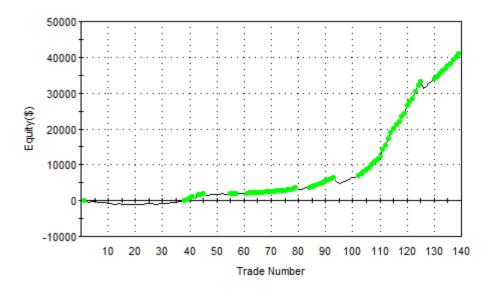
The final strategies were build for individual equities. The program was used to build strategies for Amazon (AMZN) and Apple (AAPL) on daily bars.

Equity Curve Line - AMZN Daily(05/16/97 13:00 - 03/17/10 13:00)





#### Equity Curve Line - AAPL Daily(09/19/94 13:00 - 03/18/10 13:00)



For Apple, the strategy was built on data from 9/19/1994 to 9/17/2009, with the period 9/18/2009 to 3/18/2010 used for out-of-sample testing. On the optimization sample, the final strategy made \$37,602 trading 100 shares per trade after \$25 per trade for costs. On the out-of-sample period, it made an additional \$3,443.

The EasyLanguage code for each strategy is part of the Builder (.gpstrat) file for that strategy and can be viewed, along with the build settings, in Builder after opening the file. These files are only available to licensed users of Builder.

Note: The bonus strategies were developed with Builder version 1.0.0. This version did not include automatic out-of-sample testing. As a result, the Builder files open with the price settings set to 100% in-sample, as required by the prior version of Builder.