



**YPY MQ4 Code Protector** - software system for the protection of the source code by its dynamic encryption and flexible automatic licensing (limitation of usage time, account number, owner's name, name of a server, etc.). This protector helps source code developers and their customers to additionally protect their software (experts, indicators, scripts, etc.) in a compiled state form of unauthorized research, modification, renaming and resale.

Any developer knows very well how much time and effort is spent on independent development of an efficient algorithm and he has an unconditional right to defend it.

This protection is implemented at the primary level of the source code by its dynamic encryption by algorithms developed by us without any additional libraries or external tools of protection against decompilation, i.e. the source code in the format \*.mq4 is being converted itself.

The complex of built-in protection is activated during the compilation of the encrypted source code into the \*.ex4 format, which makes the process of study and analysis of the compiled file extremely complicated, or even makes it impossible.

[The current "Basic" version](#) performs automatic binding of the software to the parameters of the trading account that is connected to the user terminal in which the encryption of the source code happens, sets a 72 hour (three-day) period of validity of the license for the encrypted product and it automatically binds to the trading instrument, on which chart the protector is being started.

[The current "PRO" version](#) performs automatic binding of the software to any parameter of any accounts by the choice of user, including setting any period of the license.

To get an idea of the protector, each user can try the free "Basic" version with the same functionality.

## Key features

§ The protector is simple and easy to use, does not require any special knowledge and programming skills by the users. Anyone can use the protector locally on his computer to protect the source code, without transferring it to third parties for this purpose.

§ Dynamic Encryption of the source code by a unique proprietary algorithm, which allows you to protect the trading algorithm or strategy from research.

§ Automatically integrated system of a flexible licensing (limitation of usage time, account number, owner's name, trade name server, etc.)

§ The system of the originality check of any data encrypted by protector allows any user to easily detect whether he is using the original product or fake.

§ In order to additionally protect the owner of the code, the complex of protection information of the owner of the code with information block «License Information» (displayed on the graph in the lower right corner) is integrated in each encrypted source code automatically.

Displayed on the chart:

+ Information containing the ID of the source code encryption (by which the owner can always personalize a specific instance of the product). This can be very convenient, for example, the owner of the code can understand which specific instance of the product was leaked to unauthorized public access.

+ Original file name (original filename), which was used when the owner of the source code performed the encryption. Any subsequent distortion of the original protected file name will lead to a damage of logic (only addition to the original names is permitted for convenience). Thus, it would be very difficult for attackers to completely change the file name.

+ Name of the manufacturer (#property copyright). At the time of encrypting the data is read from the source and it is stored in the encrypted form. Thus, even if in the future attackers make changes to the compiled \*.ex4 file, indicating there another developer, then the original manufacturer data set by owner would continue to be displayed on the chart.

Any subsequent unauthorized modification of the information displayed on the chart in the data block leads to a damage of logic.

## Description of the main settings of the protector

- **Mode:** Protected and licensed / Originality check
- **Protected and licensed** - the main mode, in which the protection and licensing of software is performed
- **Originality check** - in this mode the originality of any data encrypted by protector software is performed

To use the protector, you must first copy your source code in the \*.mq4 format into the directory of your terminal by this path \MQL4\Files, then install the Protector (in the «Experts» section) to any chart and fill in the desired licensing restrictions. Protector will automatically create two new folders «ProtectMQ4» (the encrypted source code and log file with licensing settings is stored there) and «SourceMQ4» (the original source is saved there). After this, the user only left to follow the usual way to compile the source code into an encrypted \*.ex4 executable in your MT4 terminal.

<https://www.youtube.com/watch?v=j-5uu2FrkFk>

<https://www.youtube.com/watch?v=-4V7mfcRdww>

## Licensing restrictions settings:

- **Account:** account number
- **Server:** the name of the trade server
- **Name:** The name of the account holder
- **Instrument:** the name of the trading instrument for which you allow a customer to use the software
- **Currency:** the name of the account currency
- **LifeTime:** ON / OFF (if "ON" is selected, the EndDate limitation parameter is not used)
- **EndDate:** trial time limit
- **MaxBalance:** maximum account balance with which the usage of software is allowed
- **MinBalance:** minimum account balance with which the usage of software is allowed
- **PermittedTradingMode:** Only Tester / Demo, Tester / Real, Demo, Tester (choice of modes in which the usage is allowed)

If any of the parameter is not filled, then this limit is not used.

## Settings of the originality check:

- **ID:** identification number assigned during the encryption
- **CheckID:** control identification number
- **OriginalFileName:** the original file name
- **UserAccount:** User's trading account number

To verify the originality by any user, all of the above four fields must be filled in with the appropriate data from the «License Information» information block (displayed in the lower right corner of the chart) of compiled an encrypted software product.

## Attention

1. The protector can be used only in the terminal with the active connection to any trade server.
2. The developer supports only the latest version of the protector. Because of the specifics of the architecture and regular MT4 terminal builds updating, any previous version of the protector may stop functioning at any time. To address this issue just download the latest version of the protector.
3. The more detailed description of the functionality of the product and information on parameters will be published in the developer profile and on its website
4. When you run the protector or any encrypted software product, you should wait for a while for its activation (depending on the complexity of the source code). The encrypted software not demands additional resources further.

## Author

[IPA Investments LTD](#) specializes in innovations of software in the sphere of trading both for own requirements and for implementation of tasks of corporate clients.

[www.YPY.cc](http://www.YPY.cc)

updated 23.12.2015