

Function **iACfunc** for MQL4.

Standard function **iAC** (<http://docs.mql4.com/indicators/iac>) is calculated by formulas:

$AO = SMA(MEDIAN, 5) - SMA(MEDIAN, 34)$

$AC = AO - SMA(AO, 5)$

where:

- MEDIAN - median price,
- SMA - simple moving average,
- AO - indicator "Awesome Oscillator/AO",
- 5, 34, 5 - periods.

without the possibility to choose price, moving average and periods.

Function **iACfunc** allows calculate value with possibility to choose price, moving average and periods according to the following formulas:

$AO = MA_mode(Applied_price, Period_1) - MA_mode(Applied_price, Period_2)$

$AC = AO - MA_mode(AO, Period_3)$

double iACfunc (**string** Sy, **int** Tf, **int** MA_mode, **int** Applied_price, **int** Period_1, **int** Period_2, **int** Period_3, **int** Shift)

Parameters:

- Sy** - Symbol the data of which should be used to calculate indicator.
NULL means the current symbol.
- Tf** - Timeframe. It can be any of timeframe enumeration values (<http://docs.mql4.com/constants/timeframes>). 0 means the current chart timeframe.
- MA_mode** - MA method. It can be any of the moving average method enumeration value (<http://docs.mql4.com/constants/movings>).
- Applied_price** - Applied price. It can be any of applied price enumeration values (<http://docs.mql4.com/constants/prices>).
- Period_1** - Averaging period for calculation 1st moving average.
- Period_2** - Averaging period for calculation 2nd moving average.
- Period_3** - Averaging period for calculation 3rd moving average based on AO.
- Shift** - Index of the value taken from the indicator buffer (shift relative to the current bar the given amount of periods ago).

Example 1.

- Symbol - current chart (NULL),
- Timeframe - current chart (0),
- MA method - exponential moving average (MODE_EMA),
- Applied price - close (PRICE_CLOSE),
- Period 1 - 7,
- Period 2 - 35,
- Period 2 - 9,
- Index of the value taken from the indicator buffer - 0.

```
double result=iACfunc(NULL, 0, MODE_EMA, PRICE_CLOSE, 7, 35, 9, 0);
```

Example 2.

Symbol - GBPUSD,
Timeframe - H4 (PERIOD_H4),
MA method - smoothed moving average (MODE_SMMA),
Applied price - high (PRICE_HIGH),
Period 1 - 3,
Period 2 - 14,
Period 2 - 4,
Index of the value taken from the indicator buffer - 5.

```
double result=iACfunc("GBPUSD", PERIOD_H4, MODE_SMMA, PRICE_HIGH, 3, 14, 4, 5);
```

How to include custom function into program (e.g. expert adviser, script) in MQL4.

The compiled file-library "iACfunc.ex4" must be copied into directory *MT4_directory\experts\libraries* . In code of the program before input parameters operator *#import* must to be used (<http://docs.mql4.com/basis/preprocessor/import>).

Example.

```
//+-----+
#import "iACfunc.ex4"
double iACfunc(string Sy,int Tf,int MA_mode,int Applied_price,
               int Period_1,int Period_2,int Period_2,int Shift);
#import

//+-----+
int init() { return(0); }
//+-----+
int start()
{
//----
// Body of program
//----
return(0);
}
//+-----+
int deinit() { return(0); }
//+-----+
```