

Note: Program must calculate pips correctly for major pairs (including JPY pairs).

EA Inputs

//--- Trading Inputs

TradeType (1 for BUY, 2 for SELL, default:1)

Lots (default: 0.1)

SlippagePips: (default:3)

TakeProfitPips (integer, default:0)

TrailingStopLossPips (integer, default:0)

MarketOpenBuffer (integer, new orders forbidden for XX minutes after market open, default:0)

MarketCloseBuffer (integer, new orders forbidden for XX minutes before market close, default:0)

//--- Target Cluster

TargetCluster (integer, default:0)

//--- Input 1

C1_CLOP = 0.000000

C1_HiOP = 0.000000

C1_LoOP = 0.000000

//--- Input 2

C2_CLOP = 0.000000

C2_HiOP = 0.000000

C2_LoOP = 0.000000

//--- Input 3

C3_CLOP = 0.000000

C3_HiOP = 0.000000

C3_LoOP = 0.000000

//--- Input 4

C4_CLOP = 0.000000

C4_HiOP = 0.000000

C4_LoOP = 0.000000

//--- Input 5

C5_CLOP = 0.000000

C5_HiOP = 0.000000

C5_LoOP = 0.000000

//--- Input 6

C6_CLOP = 0.000000

C6_HiOP = 0.000000

C6_LoOP = 0.000000

//--- Input 7

C7_CLOP = 0.000000

C7_HiOP = 0.000000

C7_LoOP = 0.000000

//--- Input 8

C8_CLOP = 0.000000

C8_HiOP = 0.000000

C8_LoOP = 0.000000

//--- Input 9

C9_CLOP = 0.000000

C9_HiOP = 0.000000

C9_LoOP = 0.000000

//--- Input 10

C10_CLOP = 0.000000

C10_HiOP = 0.000000

C10_LoOP = 0.000000

//--- Input 11

C11_CLOP = 0.000000

C11_HiOP = 0.000000

C11_LoOP = 0.000000

//--- Input 12

C12_CLOP = 0.000000

C12_HiOP = 0.000000

C12_LoOP = 0.000000

Other Variables Calculated in EA

double CLOP
double HiOP
double LoOP
Cluster

double DistCent1
double DistCent2
double DistCent3
double DistCent4

double DistCent5
double DistCent6
double DistCent7
double DistCent8

double DistCent9
double DistCent10
double DistCent11
double DistCent12

EA only runs once, at the beginning of a new bar.

- 1) When new bar begins, close open orders on currency pair (regardless of profit or loss). For example, EA is running on EURUSD M15. New bar begins. Close EURUSD tickets only.
- 2) Calculate **CIOP**, **HiOP**, **LoOP** of previous bar.
 - a. **CIOP** = Close of previous bar / Open of previous bar
 - b. **HiOP** = High of previous bar / Open of previous bar
 - c. **LoOP** = Low of previous bar / Open of previous bar
- 3) Calculate **DistCent1**, **DistCent2**, ... **DistCent12**.
 - a. $\text{DistCent1} = \sqrt{(\text{CIOP} - \text{C1_CIOP})^2 + (\text{HiOP} - \text{C1_HiOP})^2 + (\text{LoOP} - \text{C1_LoOP})^2}$
- 4) Put DistCent variables into an array. Array[12]={**DistCent1**,**DistCent2**, ... **DistCent12**}
- 5) Find the Minimum DistCent in the array. If **DistCent1** is minimum, **Cluster**=1. If **DistCent2** is minimum, **Cluster**=2, and so on. On the chart, Print "**Cluster** = "**Cluster**"
- 6) If **Cluster**=**TargetCluster** AND **TradeType**=1 AND (**MarketOpenBuffer** and **MarketCloseBuffer** say it's OK to trade), then open a BUY ticket (**Lots**, **TrailingStopLossPips**,**TakeProfitPips**).
- 7) If **Cluster**=**TargetCluster** AND **TradeType**=2 AND (**MarketOpenBuffer** and **MarketCloseBuffer** say it's OK to trade), then open a SELL ticket (**Lots**, **SlippagePips**,**TrailingStopLossPips**,**TakeProfitPips**).
- 8) STOP. EA does not run again until beginning of next bar, starting at Step 1.

If you'd like to test the program you can use the following inputs (0.000000 for all other **//---** Input 7-12) on EURUSD M15 chart. These values probably will not make profit, just sample values to test functionality.

TradeType: 1

TargetCluster: 1

//--- Input 1

C1_CIOp = 0.999165

C1_HiOP = 1.00015

C1_LoOP = .998885

//--- Input 2

C2_CIOp = 0.995774

C2_HiOP = 1.00301

C2_LoOP = 0.995092

//--- Input 3

C3_CIOp = 0.999991

C3_HiOP = 1.000475

C3_LoOP = 0.999593

//--- Input 4

C4_CIOp = 1.001378

C4_HiOP = 1.001905

C4_LoOP = 0.999799

//--- Input 5

C5_CIOp = 0.999995

C5_HiOP = 1.000093

C5_LoOP = 0.999900

//--- Input 6

C6_CIOp = 1.000384

C6_HiOP = 1.000559

C6_LoOP = 0.999900