



Zup Universal ZigZag with Pesavento Patterns ★★★★★ TECHNICAL INDICATOR

[My purpose with the article is to help you to find your parameter settings and find the best way that can help you to utilize this very complex and complete indicator to prosper. See the list of its parameters below in this article.](#)

[Enjoy!](#)

Starting from ZUP v 150 new addition; being able to mark Elliott waves on the chart and have an easier GUI (graphical user interface) helping users.

The development of ZUP took place over a decade. There is no question about how much effort, hard work and contribution of lot of traders went into this development. Due to this, ZUP was and is one of the most popular harmonic pattern indicators.

Indicator: ZUP

Platform: MT4

Author: Eugeni Neumoni (NEN)

Price: free up to v 149, placed out to the Market starting v 150.

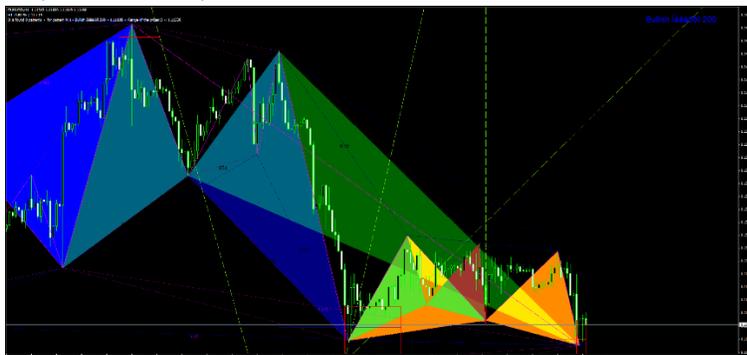
Link to the Market: <https://www.mql5.com/en/market/product/19758>

Watch video: <https://youtu.be/ubrEyScUGq0>

Sample pic:

[img]<https://charts.mql5.com/8/210/eurusd-h1-forex-capital-markets-2.png>[/img]

<https://www.mql5.com/en/charts/3630166/eurusd-h1-forex-capital-markets>



From the How to use document:

Indicator allows you to:

Build Pesavento patterns and identify the different shapes, for example, patterns Gartley.

Automatically display fibo and show the price value of fibo. Build two variants of the Fibonacci extensions.

Build various options Fibo fans (Fibo Fan). Build a pitchfork Andrews line reaction to pitchforks Andrews and 50% of the median, 50% of the Andrews pitchfork, lines Schiff ... and all lines included in the kit Andrews' Pitchfork.

Build time zones fibo (Fibo Time).

Displays information on the current currency pair with higher timeframes.

Output signal at the appearance of a new ray of ZigZag.

There is a possibility of constructing a price channel (levels of swing), the levels of previous peaks ZigZag.

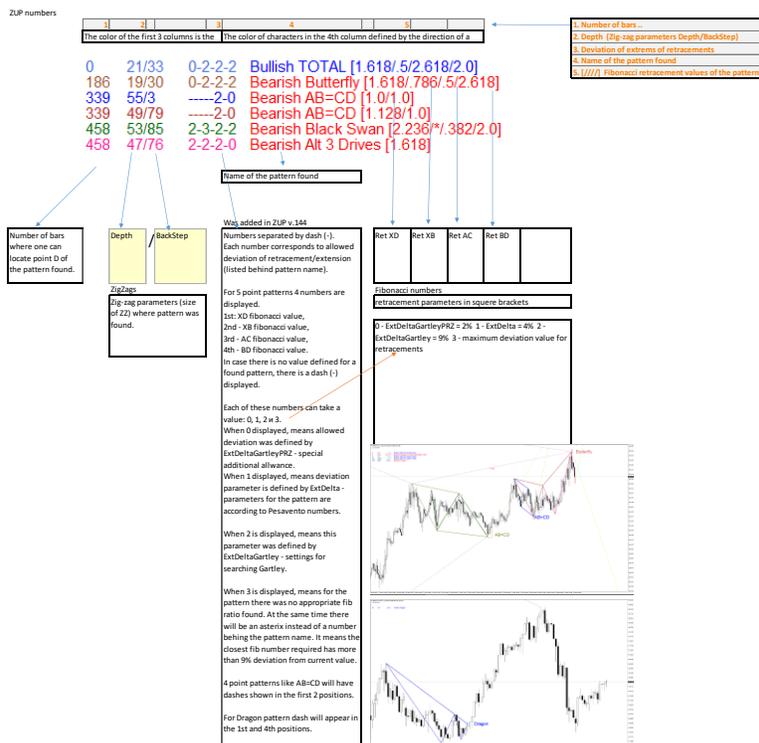
Build ZigZag Fibonacci.

Search of patterns Gartley

Build fibo arcs, build fibo spiral ... and much more ... (33 harmonic patterns in its list, user can also define custom pattern, alert available, very versatile tool.)

Let's start to look at parameters and understanding some of its displayed numbers

The following map was built with the help of my trader friend (Дмитрий Хлюстин from Onix-Trade.net/forum/) for some numbers displayed by ZUP for harmonic patterns:



The complete list of ZUP parameters.

• "Parameters for ZigZag"

ExtIndicator – selects the version of indicator based on which Pesavento patterns are built.

0 - ZigZag of Metatrader, standard, slightly optimized

1 - ZigZag by Alex

2 - Indicator similar to the one built in Ensign

3 - ZigZag Ensign with a variable number of minBars

4 - ZigZag, developed by Tauber

5 - A variation based on Gann swings

Values between 6 and 10 are applied to the output of zigzags from a higher time frame in relation to the currently selected time frame. The ZigZag codes earlier were stored in external files. Currently, all the codes are embedded in the ZUP. External zigzags * .mq4 are not used.

6 - DT-ZigZag with external ZigZag_nen3.mq4. It is based on the standard ZigZag

7 - DT-ZigZag - DT_ZZ.mq4 (developed by Klot)

8 - DT-ZigZag - CZigZag.mq4 (developed by Candid)

9 – A version of the fractal zigzag

10 - DT-ZigZag - GannSwing - like algorithm ExtIndicator = 5 in DT mode

11 - Includes a search of patterns Gartley on the basis of the standard ZigZag

12 - ZigZag, developed by Talex

13 - SQZZ zigzag developed by Tovaroved (Товаровед)

14 - ZZ_2L_nen, developed by Wellx (automatic calculation of levels - nen)

ParametresZZforDMLEWA - defines a set of parameters minBars - ExtBackstep for ExtIndicator mode = 0 and 6 = ExtIndicator used in the DML & EWA approach.

1 - minBars = 5 ExtBackstep = 8

2 - minBars = 8 ExtBackstep = 13

3 - minBars = 13 ExtBackstep = 21

4 - minBars = 21 ExtBackstep = 34

5 - minBars = 34 ExtBackstep = 55

6 - minBars = 55 ExtBackstep = 89

7 - minBars = 89 ExtBackstep = 144

8 - minBars = 144 ExtBackstep = 233

0 - value sets parameters minBars - ExtBackstep

minBars - filter bars (specified number of bars)

minSize - filter on the number of points (defines the number of points)

ExtBackstep - setting the remainder of the parameters from the ZigZag from MT4

noBackstep – excludes from the calculations the ExtBackstep parameter in the standard ZigZag algorithm in the following modes:

ExtIndicator mode = 0,

ExtIndicator = 6 and

ExtIndicator = 11

RecoverFiltr - sets the recovery mode of extremes removed by parameter ExtBackstep.

externalBar – the way of processing an external bar in the standard ZigZag

0 - external bar in a way of single buffer ZigZag,

1 - in MZZ (9),

2 - special processing of the external bar

GrossPeriod - the value of the time frame, expressed in minutes (number of minutes), the data from which the input for ZigZag in mode DT-ZigZag are taken from.

minPercent - percentage filter (set percentage, e.g. 0.5) If you use percentages - define the number and set minSize = 0

ExtPoint = 11 - the number of points of the ZigZag for ZigZag Talex

StLevel - the first level of the ZigZag (Wellx)

BigLevel - the second level of the ZigZag (Wellx)

auto – task to automatically calculate the levels of StLevel and BigLevel

minBar -% value to calculate StLevel

maxBar -% value to calculate BigLevel

Two variables to set the parameters for fractal based ZigZag

ExtBarLeft - the number of bars on the left below the maximum

ExtBarRight - the number of bars on the right below the maximum

ExtStyleZZ -

true = sets ZigZag lines (color, thickness, style) visible, according to the selection in the Color tab in the indicator parameters

false = intermediate ZigZag lines do not show up on the chart, all the ZigZag lines will be shown only at extremes

ExtMaxBar - specifies the number of bars to be considered in the calculation of the ZigZag.

When “0” - ZigZags are calculated on the entire history

ExtMinBar - sets the minimum number of bars, how far back the ZigZag will be calculated

ExtNumberPeak - includes numbering the ZigZag swings

ExtNumberPeak10 - enables to show numbers only for the first 10 fractures / swings

ExtNumberPeakLow – shows numbers only at Low, or High and Low

[ExtNumberPeakColor](#) - the color of the numbers

[ExtNumberPeakFontSize](#) - size numbers

- "Parameters for fibo Levels"



[ExtFiboDinamic](#) - enables output dynamic Fibo levels. Dynamic Fibo levels are displayed on the first ray of ZigZag.

[ExtFiboStatic](#) - enables the output of static Fibo levels

[ExtFiboStaticNum](#) – number of ZigZags based on which, will be calculated and displayed the static Fibonacci levels. This range must be between 2 and 9.

$$1 < \text{ExtFiboStaticNum} \leq 9$$

[ExtFiboCorrectionExpansion](#)

= false - Fibonacci correction

= True - Fibonacci expansion

ExtFiboD and ExtFiboS - color selection of dynamic and static Fibo level information (lines and corresponding fibo numbers).

ExtFiboStyle - sets the line style for Fibo levels

ExtFiboWidth - sets the line thickness for Fibo levels

• "Parameters for Pesavento Patterns"

ExtPPWithBars - specifies what information to display based on Pesavento patterns

0 – Displays the value of retracement at patterns Pesavento

1 – Displays the number of bars between points of retracement in a Pesavento pattern

2 - Displays the number of bars for the first and second conditional ZigZag legs and the retracement levels of Pesavento pattern in between those.

3 – Displays the time of retracement after the price retracement. Retracment of time is calculated as the ratio of the number of bars on the second leg of a ZigZag to the number of bars on the first leg of ZigZag

4 – Displays the time of retracement, calculated as the ratio of the time the second leg to the time of the first leg formation required

5 - Some of the output from this parameter value are irrelevant.

6 - Displays the calculated number of points and the percent value of deviation from the Pesavento retracements

7 - Displays the speed of the first and second legs. This option can also be used to determine the scale values

automatic scaling of fibo arcs.

8 – Displays the ratio of the length of the second leg compared to that of the first leg

9 - Displays the percentage change in price on the first and second legs

10 - Displays the time and cost of the extremes located right

ExtHidden –

0 – All the Pesavento numbers, lines and patterns are hidden – not displayed

1 – Displays all the lines between the extremes where retracement > 0.14 and < 5 .

- 2 – Displays only those lines where the Pesavento retracement numbers are equal (and 0.447, 0.886, 2.236, 3.14, 3.618 for the construction of Gartley patterns)
- 3 – Displays the items listed under point 2 above (Pesavento numbers and related lines)
- 4 – Displays the non Pesavento numbers and corresponding lines
- 5 - Hides all elements. One can only see ZigZag and Gartley patterns

ExtFractal - the number of swing points (extremes, i.e. highs, lows), which are connected to other swing points by lines

ExtFractalEnd - the number of swing points (extremes, i.e. maximums and minimums), which are connected to other swing points and past this swing point there are no more connecting lines
If ExtFractalEnd = 0 then the last swing equals to the maximum number of swing points. Thus the minimum value must be ExtFractalEnd = 1

ExtFiboChoice - selecting a set of numbers to construct Pesavento patterns. The parameter range is from 0 to 11

ExtFiboZigZag - enables displaying "Fibonacci ZigZag"

ExtDelta – defines the tolerance. If the current retracement is different from the values of the nearest Pesavento within the value of tolerance, it displayed on the graph as a Pesavento pattern. It defines the value of the potential reversal zone. This value should be $0 < \text{ExtDelta} < 1$

ExtDeltaType –

- 0 - Shows recovery percentages "as is" rounded to 2 decimal places
- 1 - Tolerance calculation (the number Pesavento %) $< \text{ExtDelta}$
- 2 - $((\% \text{ the number Pesavento}) / \text{number Pesavento}) < \text{ExtDelta}$
- 3 - Shows recovery percentages "as is" rounded up to 3 decimal places

ExtSizeTxt – defines the font size for the numbers displayed

ExtLine – defines the color for connecting lines

ExtLine886 - defines the color for connecting lines of the Pesavento numbers

ExtNotFibo – defines the color of all other numbers

ExtPesavento – defines the color of the Pesavento numbers

ExtGartley886 – defines the color for numbers .886 and the other additional ones

• "Parameters for Gartley Patterns"

AlgorithmSearchPatterns - choose a search algorithm for the pattern scanner according to the search mode selected for the ExtIndicator = 11

0 - matching algorithm ExtIndicator = 0 - this algorithm was applied to the ZUP124 version and before that in ExtIndicator = 11 mode. Values > 0 are added starting with the 124 version

1 - corresponds to ExtIndicator algorithm = 1 - zigzag leg size of Alex is defined in point values

2 - matching algorithm ExtIndicator = 1 - zigzag leg size of Alex is defined in percentage values

3 - corresponds ExtIndicator algorithm = 2

4 - corresponds ExtIndicator algorithm = 4

5 - corresponds ExtIndicator algorithm = 5

6 - corresponds ExtIndicator algorithm = 12

PotentialsLevels_retXD - enables displaying the retracement levels of XD for potential 5 point patterns.

This will work in ExtIndicator = 11 mode only, when pattern found, this level will be displayed from point C on

0 – disables displaying potential levels

1 - potential pattern levels are displayed along the patterns when parameter ExtGartleyOnOff = true

2 - the potential levels are displayed. At the same time it disables displaying the patterns

visibleLevelsABCD - specifies various options for displaying levels for developing D points of potential five-point patterns

0 - no additional levels displayed

1 - displays all possible BD retracement levels on the graph

2 - displays all possible levels of different versions of AB = CD on the graph

3 - displays both BD retracement levels and AB=CD versions (as described under points 1 and 2)

maxDepth – defines the maximum value (minBars), for the parameter Depth ZigZag with the active scanning to find Gartley patterns.

This option is better to use smaller, to a smaller load on the processor. But on the other hand, too small value will not allow to find some patterns. Parameter needs to find experimentally.

It is applicable when AlgorithmSearchPatterns = 0

minDepth - defines the minimum value of Depth to search for Gartley patterns.

FiboStep – enables calculation of the Backstep parameter for pattern search, based on the formula

$$\text{Backstep} = \text{Depth} * 1.618$$

IterationStepDepth - iteration step change for ZigZag Depth parameter when searching for Gartley pattern

maxSize - the maximum value of leg size in points. It is used for pattern scanning when the following values are set to:

AlgorithmSearchPatterns = 1

AlgorithmSearchPatterns = 3

AlgorithmSearchPatterns = 4

AlgorithmSearchPatterns = 6

minSize - the minimum leg size defined in points.

IterationStepSize – iteration step change for ZigZag Size parameter when searching for Gartley

maxPercent - the maximum percentage used for the calculation of ZigZag of Alex.

It is used for pattern scanning when the following value is set to:

AlgorithmSearchPatterns = 2

minPercent - the minimum percentage used for the calculation of ZigZag of Alex

IterationStepPercent - - iteration step (percent) for changing the parameter ZigZag Percent

DirectionOfSearchMaxMin - sets the direction of the search:

false - from minDepth to maxDepth

true - from maxDepth to minDepth

SelectPattern - Group of five point patterns to search for "fuzzy" and "accurate" patterns.

0 - Search all patterns

1 - Search only the classic patterns - Gartley, Butterfly, Bat, Crab, except TOTAL patterns

2 - Search classic and neo-harmonic (non-classic / exotic / anti-pattern) patterns

3 - Search exotic patterns and exotic anti-pattern except TOTAL patterns

4 - Search only anti-patterns except TOTAL patterns

5 - Search for all patterns except TOTAL patterns

6 - Search only for TOTAL patterns

7 - Search specific five-point patterns based on setting the visiblePattern value pattern

8 - Disables the search for five-point patterns

visiblePattern - specifies individual patterns to search for. Default is off, i.e. no pattern to search for is selected.

NumberPattern - the number of the pattern by which the zigzag calibrated and parameters which are output from the InfoTF

0 - Displays the zigzag with parameters in ExtIndicator = 0 mode

ExtGartleyTypeSearch - search mode patterns

0 - Search ends after the first found pattern

1 - displays all patterns in the area specified by parameter maxBarToD. Search is repeated for each recalculation of the zigzag

2 - displays all patterns in the area specified by parameter maxBarToD. The search is performed only once

ExtHiddenPP - Zigzag display mode for ExtIndicator == 11

0 - the zigzag is not displayed. Shows points of the zigzag summits. Patterns Pesavento not displayed.

1 - shows a zigzag pattern calibrated, set parameter NumberPattern. Pesavento patterns displayed in the usual way.

2 - the zigzag is not displayed. Shows points at the vertices of a zigzag. Patterns Pesavento only displayed for the vertices of patterns Gartley

ExtGartleyOnOff - includes display of patterns Gartley. Not in the scanner mode.

maxBarToD - sets the maximum number of bars from zero to D pattern

patternInfluence - 0 - output patterns, in which the zero bar to bar with a point D not more than maxBarToD bars

1 - take into account the effect of the pattern in this action will be canceled maxBarToD parameter

2 - Search patterns is carried out throughout the zigzag markings

patternTrue = true - output patterns that satisfy the condition:

for bearish patterns on the site from the point D to zero bar should be no bars, in which the maximum of the bar above the maximum scope of point D of the zone;

for bullish patterns in the area from the point D to zero bar should be no bars, in which at least the bar below the low point of the frame of the zone D.

AllowedBandPatternInfluence - given coefficient on the distance between the points X and D pattern. This ratio determines the distance from the point D to the point where the effect of the pattern supposedly ends

RangeForPointD - allows display of the zone of point D

OldNewRangeForPointD - choice of options for building development zones in terms of the pattern

ExtColorRangeForPointD - frame color point D Development Zone

VectorOfAMirrorTrend = 1 shows the trend vector

VectorOfAMirrorTrend = 2 displays mirroring the trend vector

VectorOfAMirrorTrendColor - sets the color of the reverse of the trend line

VectorOfAMirrorTrendStyle - sets the style of the reverse of the trend line

shortNamePatterns - authorizes the conclusion of short names of patterns

visibleLineOrTriangle - enables output patterns in a line or in the form of triangles, except patterns AB = CD

PatternLineStyle - sets the five-point line style patterns and ABCD

PatternLineWidth - sets the thickness of the line and five-point pattern ABCD

ExtColorPatternsBullish - color bullish patterns

ExtColorPatternsBearish - color bear pattern

ExtColorPatternList - is given a list of colors for shading patterns Gartley. The color names are listed separated by commas. If any color will be recorded with an error, then this color is selected red

ExtDeltaGartley - tolerance for price variance to the default search pattern 9% - 0.09

ExtDeltaGartleyPRZ - the special allowance for the construction of the frame of point D pattern

levelD - includes a conclusion on the chart levels retracement XD possible precise patterns of options for the current combination

colorLevelD - sets color levels retracement XD

Equilibrium - Equilibrium line includes the output, Reaction1 and Reaction2

ReactionType - specifies the type of reaction lines

EquilibriumStyle - sets the line style

EquilibriumWidth - sets the line thickness

ColorEquilibrium - sets the color for Equilibrium

ColorReaction - sets the color for Reaction1 and Reaction2

Ext_3Drives - enables output pattern 3 Drives

Ext_xO - sets the ratio to find 7-point pattern 3 Drives

Dragon - Dragon pattern enables output

PeakZZDragon - sets the number of extremum zigzag, to which the searched pattern Dragon

Ext_4PointPattern - allows search for 4-htochechnogo pattern continued

_maxXB - sets the maximum retracement XB. Learn about this pattern can be the author here:
<http://kanetrading.com/>

ABCD - allows search pattern AB = CD

0 - AB = CD pattern is not displayed

1 - shows any AB = CD

2 - output only harmonic AB = CD, in which the ratio is within the tolerance range of match Fibo

searchABCDAAlternate - enables output alternate AB = CD pattern

ABCDAlternate - specifies a list of alternate ABCD patterns. In this list, separated by commas coefficients X of the formula $X * AB = CD$

visibleABCDrayZZ - enables output ABCD patterns in a line

Ext_noname - allows search for the unknown five-point pattern, in which all four retracements are some "fibe"

CustomPattern - determines whether or not to user patterns

0 - does not appear user pattern

1 - output together with other patterns

2 - shows only user pattern

NameCustomPattern - the name of the user pattern

minXB - sets the minimum value of retracement XB

maxXB - sets the maximum retracement XB

minAC - sets the minimum value of retracement AC

maxAC - sets the maximum retracement AC

minBD - sets the minimum value of retracement BD

maxBD - sets the maximum retracement BD

minXD - sets the minimum value of retracement XD

maxXD - sets the maximum znachenieEquilibrium retracement XD

The minimum and maximum retracement set the range for the search

filtrEquilibrium - includes a filter line passing through point X and B pattern. If the filter is on, the pattern will be drawn when the price breaks through the line while moving from the C point of the pattern in the direction of point D. This only works with custom patterns and patterns noname.

readFromFileListPatterns - sets the reading patterns of the list from the file \\ ZUP \ ListPatterns \ listpatterns.csv

0 - Read patterns from the file list of prohibited

1 - used to search for five-point pattern only those patterns, the list of which is loaded from a file

2 - to the built-in ZUP five-point list patterns appends a list of patterns from a file. In this case, a composite list of patterns.

NameFileListPatterns - specifies the name of the .csv file from which to read the list of patterns of parameters

writeToFileListPatterns - allows recording Patterns five-point list:

1) if readFromFileListPatterns = 0 in the file: \\ ZUP \ ListPatterns \ listpatternsdefault.csv

2) if readFromFileListPatterns = 1 to the file: \\ ZUP \ ListPatterns \ listpatternscustom.csv

3) if readFromFileListPatterns = 2 in the file: \\ ZUP \ ListPatterns \ listpatternsmixt.csv

picture - allows the graphics output to the image file with the pattern

writeInfoPatternsToFileXML - allows output to a file .XML parameters of the current five-point pattern

0 - not allowed in the output file parameters

1 - time parameters are displayed in expanded form

2 - Time parameters are displayed in a number of seconds

writeInfoPatternsToFileCSV - allows the output to a .CSV file parameters of the current five-point pattern

0 - not allowed in the output file parameters

1 - time parameters are displayed in expanded form

2 - Time parameters are displayed in a number of seconds

namefileSymbolPeriod = true - given the name of the file with pictures and patterns with parameters as
Symbol () + "_" + Period () + "_ Patterns

InfoPointD - allows display information about the point D pattern in large print

MonitorPatterns - includes monitor patterns

TextSize - sets the font size of the monitor patterns

ExtGlobalVariableSet - allows recording of information about patterns in the global variables of the terminal

• "Parameters for Andrews Pitchfork"

ExtPitchforkDinamic = 0 dynamic Andrews pitchfork disabled

= 1 output dynamic Andrews pitchfork from the last two extrema ZigZag

= 2 displays the dynamic fork and line Schiff

3 = 50% of the forks

= 4 displays the dynamic line Schiff

AutoAPDinamicTestRedZone = true - automatically derived dynamic Andrews pitchfork red after testing dynamic Fork area

ExtPitchforkDinamicCustom - choice position of the first anchor point for the dynamic fork

ExtPitchforkDinamic = 3

ExtLinePitchforkD sets the color of the dynamic fork

ExtPitchforkStatic = 0 static Andrews pitchfork disabled

= 1 static Andrews pitchfork are deduced from the extreme ZigZag with ExtPitchforkStaticNum number

= 2 displays static fork and line Schiff

3 = 50% of the forks

= 4 displays the dynamic line Schiff

3 = <ExtPitchforkStaticNum <= 9 - the number of vertices of ZigZag, from which begin the static pitchfork

ExtPitchforkStaticCustom - choice position of the first anchor point to the static pitchfork

ExtPitchforkStatic = 3

ExtLinePitchforkS - sets the color of static pitchfork

ExtMasterPitchfork - sets the main fork, forks located on the wave level of the current chart

0 - in this package is not the main fork ZUP

1 - dynamic fork main

2 - the main static pitchfork

ExtPitchforkDinamicColor - sets the color of the fill channel dynamic Fork

ExtPitchforkStaticColor - sets the color of the fill channel of static pitchfork

ExtPitchforkStyle - specifies the output style forks.

0 - The solid line

1 - The dashed line

2 - dotted line

3 - The dash-dot line

4 - The dash-dot line with double points

ExtPitchforkWidth - sets the thickness of the forks O

----- Reaction Lines - RL -----

ExtRLDinamic - includes line RL response to dynamic Andrews' Pitchfork

ExtRLStyleDinamic - RL sets the style for dynamic Andrews' Pitchfork

ExtVisibleRLDinamic - allows you to display the values of the Fibonacci numbers in response to the dynamic lines of the pitchfork Andrews

ExtRLStatic - comprises the reaction line for static Andrews pitchfork

ExtRLStyleStatic - RL sets the output style for static Andrews pitchfork

ExtVisibleRLStatic - allows you to display the values of the Fibonacci numbers in response lines for static Andrews pitchfork

ExtRL146 - includes additional RL 14.6 and RL 23.6

ExtRLLineBase - hides guides reaction lines RL 0

----- Red Zone - RedZone ----- -

ExtRedZoneDinamic - includes RedZone output for dynamic Fork

ExtRedZoneStatic - includes RedZone output for static pitchfork

0 - RedZone off

1 - RedZone incorporated parallelepipedic

2 - RedZone incorporated by line RL

ExtRZDinamicValue - RL sets the minimum value for the right margin RedZone dynamic Andrews' Pitchfork

ExtRZStaticValue - RL sets the minimum value for the right margin RedZone static Andrews pitchfork

ExtRZDinamicColor - sets the color for RedZone dynamic Andrews' Pitchfork

ExtRZStaticColor - sets the color for RedZone static Andrews pitchfork

----- Internal Signal Lines - ISL -----

ExtISLDinamic - includes internal signal lines for dynamic Andrews' Pitchfork

ExtISLStyleDinamic - sets the style for dynamic ISL output Fork

ExtVisibleISLDinamic - allows you to display the values of the Fibonacci numbers in the internal signal lines for dynamic Andrews' Pitchfork

ExtISLStatic - includes internal signal lines for static Andrews pitchfork

ExtISLStyleStatic - sets the style ISL output for static pitchfork

ExtVisibleISLStatic - allows you to display the values of the Fibonacci numbers in the internal signal lines for static Andrews pitchfork

ExtISLWidth - sets output thickness ISL

ExtISLChannelDinamicColor - sets the balance between the color channel ISL .382 and .618 for dynamic Andrews' Pitchfork

ExtISLChannelStaticColor - sets the balance between the color channel ISL .382 and .618 for static Andrews pitchfork

Channel ISL includes a color specification

----- Signal line 50% of the median - SLM (2) -----

----- Channel balance 50% of the median - SLM (2) -----

ExtSLMDinamic - SLM includes dynamic pitchfork Andrews

ExtSLMDinamicColor - specifies the color of dynamic SLM forks Andrews

ExtSLMStatic - SLM comprises static forks Andrews

ExtSLMStaticColor - specifies SLM color static Andrews pitchfork

----- Schiff lines FSL line for Andrews' Pitchfork (2) -----

ExtFSLShiffLinesDinamic

= True - concluded Schiff lines FSL line for dynamic Andrews' Pitchfork

ExtFSLShiffLinesDinamicColor - reference color line FSL lines Schiff

ExtFSLShiffLinesStatic

= True - the output line FSL lines Schiff static Andrews pitchfork

ExtFSLShiffLinesStaticColor - reference color line FSL lines Schiff

---- Warning and Control line static pitchfork ----

ExtUTL - includes an upper control line Andrews' Pitchfork

ExtLTL - includes a lower control line Andrews' Pitchfork

ExtUWL - includes upper warning line

ExtVisibleUWL - it includes the output values of upper fibo levels of signal lines

ExtLWL - includes the lower warning line

ExtVisibleLWL - includes the output values Fibo levels lower signal lines

ExtLongWL - controls the length of the warning line

----- Pivot Zone - PivotZone -----

ExtPivotZoneDinamicColor - sets the fill color, dynamically. Pivot Zone

ExtPivotZoneStaticColor - sets the color shading static Pivot Zone

ExtPivotZoneFramework - concluded Pivot Zone as a frame (default) or in the form of a filled rectangle

----- Building kit forks from arbitrary candles -----

ExtCustomStaticAP - true - permits movement of the forks with the mouse

AutoMagnet - includes automatic Magnet Fork datums

AMBars - sets the number of bars on the right and left of the bar, which is located above the point of the fork binding. On this site will automatically search for an extremum

----- Building kit forks on the selected candles -----

ExtPitchforkCandle - includes the output from the selected set of forks candles

ExtDateTimePitchfork_1, ExtDateTimePitchfork_2, ExtDateTimePitchfork_3 - given the date and time of the candles, which will be built from the Andrews' Pitchfork

ExtPitchfork_1_HighLow - in the construction of villas on the selected sets of candles on the high or low point of the candle to build the first fork

----- Fib - fans -----

ExtFiboFanDinamic - enables the output of dynamic Fibo fans

ExtFiboFanStatic - enables the output of static Fibo fans displayed only static pitchfork

ExtFiboFanD - specifies the color of dynamic Fibo fans

ExtFiboFanS - sets the color of static Fibo fans

ExtFiboFanExp - the number of rays Fibo fans. true = 6, false = 4

ExtFiboFanHidden - enables output marking beam Fibo fans

ExtFiboFanMedianaDinamicColor and ExtFiboFanMedianaStaticColor - set the color Fibo fans on the median line of dynamic and static pitchfork

--- Temporary fibo zones are only displayed for static fork -----

ExtFiboTime1 - includes temporary fibo zones 1.

ExtFiboTime2 - includes temporary fibo zone 2.

ExtFiboTime3 - includes temporary fibo 3 zones.

ExtFiboTime1C - sets the color of the lines 1 time zone.

ExtFiboTime2C - sets the color line time zone 2.

ExtFiboTime3C - sets the color of the time zone lines 3.

ExtVisibleDateTime - includes showing the date and time of the time zone

ExtVisibleNumberFiboTime - allows you to identify those Fibo Time, in which you need to show the date and time

1 - Displays the date and time

0 - does not appear

the first figure - for Fibo Time 1

the second figure - for Fibo Time 2

the third digit - for Fibo Time 3

----- Setting custom values Fibo parameters -----

ExtFiboFreePitchfork - true - always custom values Fibo parameters apply.

false - used tools common to all ZUP values Fibo parameters

ExtFiboFreeRLDinamic - sets the value of the user response line for dynamic Andrews' Pitchfork

ExtFiboFreeRLStatic - sets the value of the user response line for static Andrews pitchfork

ExtFiboFreeISLDinamic - sets the value of internal user warning lines for dynamic Andrews' Pitchfork

ExtFiboFreeISLStatic - sets the value of internal user warning line for static Andrews pitchfork

ExtFiboFreeUWL, ExtFiboFreeLWL - sets the custom values of the upper and lower warning line

ExtFiboFreeFT1, ExtFiboFreeFT2, ExtFiboFreeFT3 - set custom values Fibo Time

----- Target levels and areas (price tag) -----

All parameters for the Andrews' Pitchfork, starting with the letters m, designed to generate labels

mSelectVariantsPRZ - Determining the type of output labels

= 0 - displays Tags "inside" the current (single) Fork

> 0 - Tags are displayed at the intersection of the current (baseline) Fork with external forks

= 1 - SSL crossing Tags

= 2 - the intersection of the median Tags

= 3 - crossing Tags FSL

= 4 - channel crossing area median

= 5 - channel fork intersection zone

= 6 - the intersection of the median Tags 1/2

= 7 - the intersection of the median area of the channel 1/2

= 8 - channel crossing area Schiff lines

= 9 - intersection Tags UTL

mTypeBasicAP - select the type of basic forks

= 0 - static forks from the current set

= 1 - dynamic fork of the current sets

mTypeExternalAP - Select the type of external fork

= 0 - dynamic or static current set of forks (opposite the base)

= 1 - saved from the current set of forks

= 2 - any of the current sets of forks

= 3 - static forks from other sets ZUP with the current chart

= 4 - Dynamic forks from other sets ZUP with the current chart

= 5 - any of the other sets of forks ZUP with the current chart

= 6 - forks with the current chart, derived manually without using ZUP

= 7 - any external forks

mExternalHandAP - the task of drawing tools Fork derived manually by setting the output Marks at the intersection with the data fork

= 0 - a conclusion Marks only at the intersection of the median and SSL / FSL data fork

= 1 - drawing lines fork tools with which the output is set Marks

= 2 - output only Labels without rendering themselves instruments of external fork

mAuto_d, mAuto_s - includes automatic withdrawal marks in static dynamic pitchfork Andrews

mSaveWL_TL - for automatic withdrawal of labels keeps automatically deduced warning lines - UWL and LWL - and control lines - UTL and LTL up to redraw the forks, if true,

mOutRedZone - includes the output price tags at the exit outside the red zone

mExitFSL_SSL = false - enables output lines UTL-LTL-UWL-LWL only after touching the FSL and SSL lines

mPivotPoints - Fork datum Andrews

mPivotPointsChangeColor - true - is changing color Labels PivotPoints depending on the current market

false - do not change color Labels PivotPoints

The following twelve parameters can be any value from 0 to 9

Name labels for static pitchfork

mSSL - starting signal line (initial signal line)

m1_2Mediana - 1/2 median (a 50% median)

mISL382 - internal signal line 38.2 (internal signal line 38.2%)

mMediana - (median)

mISL618 - internal signal line 61.8 (internal signal line 61.8%)

mFSL - final signal line (end signal line)

mSLM - 38.2 61.8 signal lines and 50% of the median

mFSLShiffLines - line FSL Schiff lines for static Andrews pitchfork

mUTL - Control line UTL

mLTL - Control line LTL

mUWL - warning line

mLWL - warning line

mCriticalPoints - crossing point 50% of the median with ISL 38.2 and an initial signal line.

The following eight parameters can be any value from 0 to 9

Name tags for dynamic Fork

mSSL_d - starting signal line (initial signal line)

m1_2Mediana_d - 1/2 median (a 50% median)

mISL382_d - internal signal line 38.2 (internal signal line 38.2%)

mMediana_d - (median)

mISL618_d - internal signal line 61.8 (internal signal line 61.8%)

mFSL_d - final signal line (end signal line)

mSLM_d - 38.2 61.8 signal lines and 50% of the median

mFSLShiffLines_d - line FSL Schiff lines for dynamic Andrews' Pitchfork

mCriticalPoints_d - crossing point 50% of the median with ISL 38.2 and an initial signal line.

mAllLevels - on / off all the labels

mColorUP - when the color point above the current price

mColorDN - when the color point below the current price

mColor - color when the point on the current price

mColorRectangleUP - color when the price is above the rectangle

mColorRectangleDN - color when the price is below the rectangle

mColorRectangle - the color of the price in a rectangle

mBack - sets the output of Labels in the background

mBackZones - sets the output rectangle (lines) as a background

mLineZonesWidth - label sets in thickness modes 8 and 9

mVisibleST - enables output Marks left fork first anchor point

mVisibleISL - enables output ISL names for external manual fork

WriteToFile - sets the record label values in a *.csv file for dynamic tags are recorded in Fork Price Label D folder labels for static fork stored in a folder Price Label S

mPeriodWriteToFile - specifies the number of minutes, Cheese which new label values recorded file

- "Parameters for micmed Channels"

micmed'a channels are constructed using Andrews' Pitchfork

ExtCM_0_1A_2B_Static, ExtCM_0_1A_2B_Dinamic - micmed'a channels. The value is selected from 0-5

ExtCM_FiboStatic, ExtCM_FiboDinamic - defined by the position of the median line for the construction of Andrews' Pitchfork micmed'a channels

- "Parameters for fibo Fan"

ExtFiboFanColor - fiboveery include arbitrary color specification.

ExtFiboFanNum - ray room ZigZag-a, which will be displayed arbitrary fiboveery. $1 < \text{ExtFiboStaticNum} \leq 9$

ExtFanStyle - sets the line style levels Fibo fans

ExtFanWidth - sets the thickness of the line levels Fibo fans

- "Parameters for fibo Expansion"

ExtFiboExpansion - Fibonacci extension as in MetaTrader

< 2 Fibonacci extension are not displayed

$2 =$ dynamic Fibonacci expansion

> 2 and ≤ 9 static Fibonacci extension

ExtFiboExpansionColor - sets the color lines Fibonacci extensions

ExtExpansionStyle - sets style of lines Fibonacci extension level

ExtExpansionWidth - sets the thickness of the layers of lines Fibonacci extensions

- "Parameters for versum Levels"

ExtVLDinamicColor - includes Versum Levels dynamic color choice

ExtVLStaticColor - Versum Levels includes static color choices

ExtVLStaticNum - sets the number of vertices, which are derived from Versum Levels

ExtVLStyle - sets style levels lines Versum Levels

ExtVLWidth - sets the thickness of the layers of lines Versum Levels

- "Parameters for fibo Arc"

ExtArcDinamicNum - sets the number of ZigZag fractures to which the dynamic fibo arcs are built

ExtArcStaticNum - sets the number of ZigZag fractures on which the static Fibo arc built

ExtArcDinamicColor - specifies the color of dynamic fibo arcs

ExtArcStaticColor - sets the color of static fibo arcs

ExtArcDinamicScale - sets the scale of the dynamic fibo arcs

0 - auto image; > 0 - scale set by the user

ExtArcStaticScale sets the scale stamicheskih fibo arcs

0 - auto image; > 0 - scale set by the user

ExtArcStyle - sets the line style arches Fibo levels

ExtArcWidth - sets the thickness of the lines arcs Fibo levels

- "Logarithmic Spiral"

ExtSpiralNum - sets the number of ZigZag breaks, on which the golden spiral

SpiralCycle - sets the distance between the coils. The higher the number, the smaller the distance between the turns of the spiral.

accuracy - specifies the length of straight line segments that build spiral

turns - specifies the number of spiral vitskov

clockWiseSpiral - sets the direction of the twisting spiral

true - spiral twisted clockwise

false - spiral twisted counterclockwise

spiralColor1 - specifies the color of the first spiral line

spiralColor2 - specifies the color of the second spiral line

ExtSpiralStyle - sets the style of the spiral line

ExtSpiralWidth - sets the thickness of the spiral line

- "Parameters for Pivot ZigZag"

ExtPivotZZ1Color - sets the color Pivot ZigZag 1

ExtPivotZZ2Color - sets the color Pivot ZigZag 2

ExtPivotZZ1Num - specifies the number of the beam, which is calculated 1 Pivot ZigZag

ExtPivotZZ2Num - specifies the number of the beam, which is calculated 2 Pivot ZigZag

ExtPivotZZStyle - sets style levels lines Pivot ZigZag

ExtPivotZZWidth - sets the thickness of the layers of lines Pivot ZigZag

- "Parameters for Channels"

ExtTypeChannels - Specifies the channel type.

1 - trend line passes through the zigzag fracture and at a tangent to the market. Line purposes runs parallel trendlines. This channel is based on one or beam, or two consecutive

2 - the trend line and the line objectives run parallel to the zigzag line of tangential to the market. Zigzag beam may pass between any fractures from 1 to 9

ExtTypeLineChannels - specifies the type of trend lines and goals. It can take values from 0 to 3

ExtChannelsNum - sets the number of fractures zigzag between which the channel is based.

ExtLTColor - sets the color of the trend line

ExtLCColor - sets the color line objectives

ExtLTChannelsStyle - sets the style trend line

ExtLTChannelsWidth - sets the thickness of trend lines

ExtLCChannelsStyle - sets goals line style

ExtLCChannelsWidth - sets the thickness of the purposes of the line

ExtRay -razreshaet or disables the output to the right channel

- "Parameters for Fibo Time"

ExtFiboTimeNum - sets zigzag fractures, which are built from ExtFiboTime, not tied to the Andrews Pitchfork

ExtFiboTime1x- includes temporary fibo zones 1.

ExtFiboTime2x- includes temporary fibo zone 2.

ExtFiboTime3x- includes temporary fibo 3 zones.

ExtFiboTime1Cx- sets the color of the lines 1 time zone.

ExtFiboTime2Cx- sets the color line time zone 2.

ExtFiboTime3Cx- sets the color of the time zone lines 3.

ExtVisibleDateTimex- includes showing the date and time of the time zone

ExtVisibleNumberFiboTime- allows to identify those Fibo Time, in which you need to show the date and time

1 - Displays the date and time

0 - does not appear

the first figure - for Fibo Time 1

the second figure - for Fibo Time 2

the third digit - for Fibo Time 3

- "Parameters Exp"

chHL = true - displays the confirmation levels for ExtIndicator mode = 1, ExtIndicator = 2, ExtIndicator = 3

PeakDet = true - it displays the levels of the previous highs for all modes ExtIndicator

chHL_PeakDet_or_vts - true - Default enables output lines Confirmation (price channel) and the levels of the previous ZigZag maximums.

false - output indicator i-vts.

NumberOfBars - The number of bars of the calculation (0-all) for i-vts.

NumberOfVTS - is, as I understand it, the smoothing parameter for i-vts.

NumberOfVTS1 - smoothing parameter for the second copy of i-vts.

ExtLabel = 0 normal display mode zigzags

= 1 output of tags in a predetermined place of the appearance of a new beam for the DT mode - as a character strips

= 2 marks the conclusion in the settlement place for the emergence of a new beam DT mode - in the form of a single character

ExtCodLabel - character code to display labels

- "Common Parameters"

ExtFiboType - specifies what value fib set Fibo tools

0 - standard Fibo levels

1 - Fibo with Pesavento numbers, etc.

2 - Fibo levels, user-defined

ExtFiboTypeFree - a task for the user fib:

1) Fibo fans along the median of Andrews' Pitchfork

2) arbitrary Fibo fans

3) Fibo levels

4) Fibonacci extensions

6) fibo arcs

ExtObjectColor - sets the color of the line connecting the base point of objects

ExtObjectStyle - defines's Style line connecting the base point of objects

ExtObjectWidth - sets the thickness of the line connecting the base point of objects

ExtDinamic - enables output static tools such as dynamic at the same time when a new beam static tools are moved to other fractures of Zigzag

ExtVisibleDinamic - allows you to select which tools to display static in dynamic mode

Total 11 tools. I will list them in order of following in the list:

1 - numbering zigzag fractures

2 - static Fibo levels and the first type of Fibo extension

3 - static Andrews pitchfork and all that is associated with a pitchfork

4 - static Fibo fans

5 - static Fibo extension

6 - static Versum Levels

7 - static Fibo arc

8 - static Fibo spiral

9 - Static Pivot ZigZag

10 - TV

11 - Fibo Time

Default ExtVisibleDinamic = "10000000000"

0 - is displayed in static mode

1 - shows in a dynamic mode

RefreshStaticNewRayZZ - allows redrawing static tools in cases of formation instead of the first three rays zigzag one beam.

AutoTestRedZone - at = true and ExtDinamic = true and ExtVisibleDinamic = "00100000000" static forks change position only after the price of the red zone in the new position of Andrews' Pitchfork

ZigZagHighLow - sets, from which point do the construction Pesavento patterns, Andrews pitchfork etc.

true - from Extrema bars

false - from crises ZigZag, when they hang in the "air"

ExtSendMail - sending a message to the email that appears on the pattern.

ExtAlert - enables output messages and beep when a new ZigZag ray

ExtPlayAlert - enables output messages and beep when a new pattern

AlertText - a text message when a new pattern

ExtPushNotification-includes a push notification when a new pattern

ExtPushNotificationZigZag - includes push notification of the occurrence of a new beam ZigZag

ExtBack - Specifies that all objects in the background

ExtSave - allows saving sets of forks and static Fibo Time

info_comment - it allows you to select a group of parameters for the output of this group in the information line.

A total of 5 groups of parameters.

0 - parameter group is not displayed

1 - a group of settings appears

Parameter groups:

1 - Information on the candlelight with higher timeframes

2 -% change in beam to beam tactics

3 - Options zigzags

4 - Information on the results Gartley pattern

5 - display the calculated values of RL, if the right border RedZone Andrews pitchfork to carry out on a tangent to the market

infoMerrillPattern - true - to display information about the patterns

false - do not display information about the patterns

infoTF - includes information on larger timeframes 5 (price glass).

It displays the name of the timeframe. The size of the candle in points.

Current situation with respect to the minimum prices.

Also it shows the height of the beam zigzag expressed as a percentage.

It shows the operation and display settings zigzags.

It displays the names of Gartley pattern and size of a possible price point D development zone for Gartley patterns.

It displays the size of Andrews' Pitchfork RedZone value ExtRedZoneDinamic values = 1 and ExtRedZoneStatic = 1

Conclusion vertical lines on the zero bar:

CursorLine - authorizes the conclusion of vertical lines on the zero bar

CLColor - sets the color of the vertical line

CLWidth - sets the thickness of the vertical line

CLStyle - sets the style of the vertical line

CLBack - sets the output of the line above or below the chart

The next group of parameters displays the name Gartley patterns in large print

bigText - enables output pattern name in large print

Also displays the name of Merrill's large print pattern

bigTextSize - sets the font size

bigTextColor - specifies the color of the font (for Gartley Bullish Patterns)

bigTextColorBearish - sets the font color for the Bearish Gartley Pattern

bigTextX - the horizontal distance to the point of writing output

bigTextY - the vertical distance to the point of writing output

ExtVisible - output disabled ZUP without unloading from memory

ExtReset - voostanovlenie work with wave zigzag

ExtPanel - on / off selection panel wave symbols

ExtComplekt - specifies the number of the indicator. When several ZUP indicators are applied to the same graph this parameter identifies the objects on the graph of the individual ZUP indicators. This is to make sure all the different copies of the indicator are working correctly.

For a better look of the map I include it here again:

ZUP numbers

1	2	3	4	5
The color of the first 3 columns is the			The color of characters in the 4th column defined by the direction of a	

1. Number of bars ..
2. Depth (Zig-zag parameters Depth/BackStep)
3. Deviation of extremis of retracements
4. Name of the pattern found
5. [///] Fibonacci retracement values of the pattern

0	21/33	0-2-2-2	Bullish TOTAL [1.618/.5/2.618/2.0]
186	19/30	0-2-2-2	Bearish Butterfly [1.618/.786/.5/2.618]
339	55/3	----2-0	Bearish AB=CD [1.0/1.0]
339	49/79	----2-0	Bearish AB=CD [1.128/1.0]
458	53/85	2-3-2-2	Bearish Black Swan [2.236/*/.382/2.0]
458	47/76	2-2-2-0	Bearish Alt 3 Drives [1.618]

Number of bars where one can locate point D of the pattern found.

Depth / BackStep

ZigZags
Zig-zag parameters (size of ZZ) where pattern was found.

Name of the pattern found

Was added in ZUP v.144

Numbers separated by dash (-). Each number corresponds to allowed deviation of retracement/extension (listed behind pattern name).

For 5 point patterns 4 numbers are displayed.
1st: XD fibonacci value,
2nd - XB fibonacci value,
3rd - AC fibonacci value,
4th - BD fibonacci value.
In case there is no value defined for a found pattern, there is a dash (-) displayed.

Each of these numbers can take a value: 0, 1, 2 or 3.

When 0 displayed, means allowed deviation was defined by ExtDeltaGartleyPRZ - special additional allowance.

When 1 displayed, means deviation parameter is defined by ExtDelta - parameters for the pattern are according to Pesavento numbers.

When 2 is displayed, means this parameter was defined by ExtDeltaGartley - settings for searching Gartley.

When 3 is displayed, means for the pattern there was no appropriate fib ratio found. At the same time there will be an asterix instead of a number behind the pattern name. It means the closest fib number required has more than 9% deviation from current value.

4 point patterns like AB=CD will have dashes shown in the first 2 positions.

For Dragon pattern dash will appear in the 1st and 4th positions.

Ret XD	Ret XB	Ret AC	Ret BD
--------	--------	--------	--------

Fibonacci numbers
retracement parameters in square brackets

0 - ExtDeltaGartleyPRZ = 2% 1 - ExtDelta = 4% 2 - ExtDeltaGartley = 9% 3 - maximum deviation value for retracements

