

ARIANE VERSION 3

USER'S TIPS

(as of 2013 March the **current public release** is Ariane V3 till V4 is also made public)

THIS ARIANE VERSION ALLOWS YOU (almost) **TOTAL MASTERY ON CORDAGE ROUTE, CODING PATTERN and COLOURS PATTERN** (see this article <http://tinyurl.com/cdh7gca>)

MAIN ADDITIONS: TOOL BOXES FOR COMPLETE EDITION OF CROSSING TYPES and COMPLETE EDITION OF COLOURS PLUS MANUAL PINS PLACING MODE

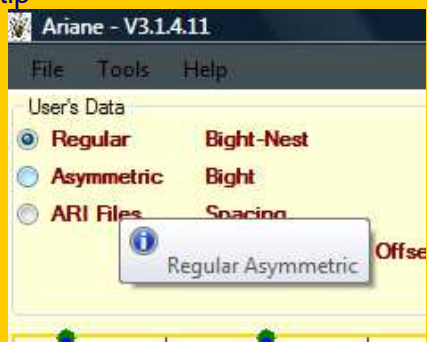
You will still need to study the VERSION 2 MANUAL as in this document we see ONLY what has been CHANGED or ADDED.

You cannot realistically hope to make do without it (unless you already are an expert with this V2 and with the domain of **NESTED-BIGHT CYLINDRICAL KNOTS** plus **REGULAR** and **SEMI-REGULAR C.K !**)

The first 30 pages in this V2 manual contains many teachings about those **NESTED-BIGHT** knots that you will need to know.

Link to User_Manual_VERSION 2 : <http://tinyurl.com/ckr5z32>

THIS VERSION HAS A WHOLE COLLECTION OF " TOOL TIPS " : let the MOUSE INDEX POINTER hover over a word or an icon and you will get" a tip"



Here hovering on the word Asymmetric

ARIANE

Fig 1 full screen window. Quite a lot of change since V2

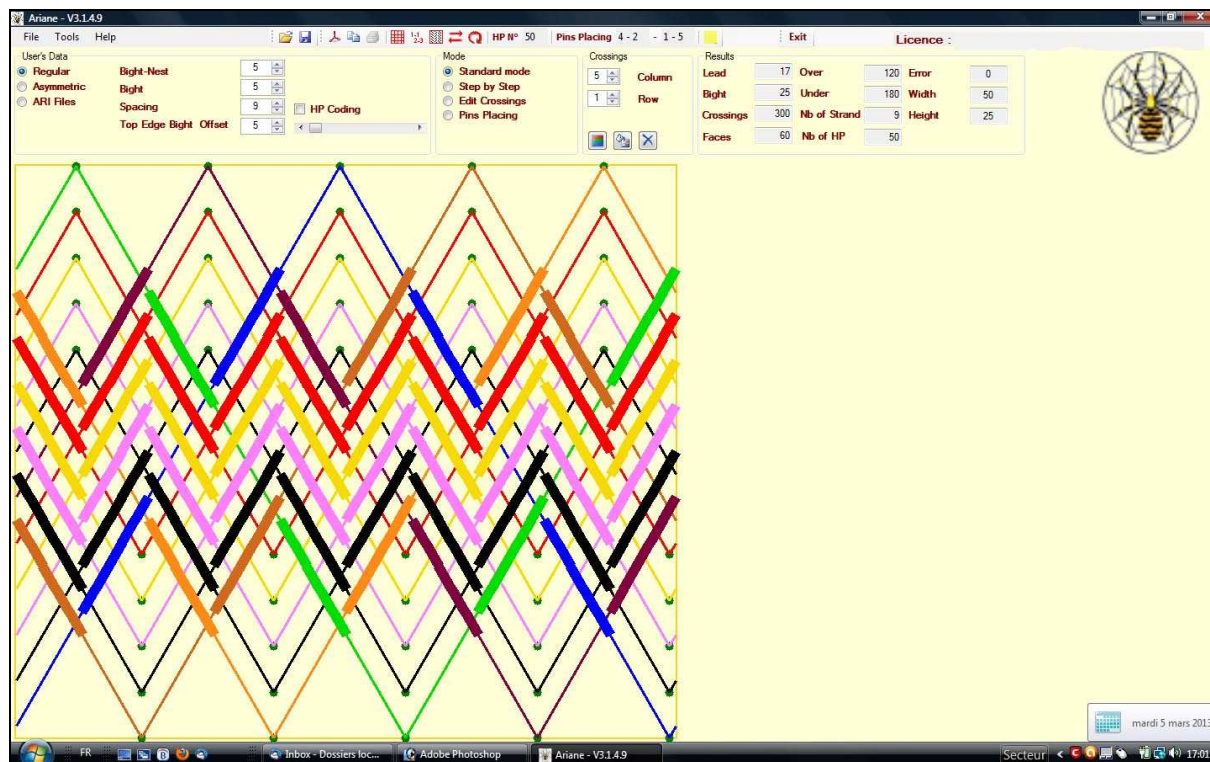


Fig 2

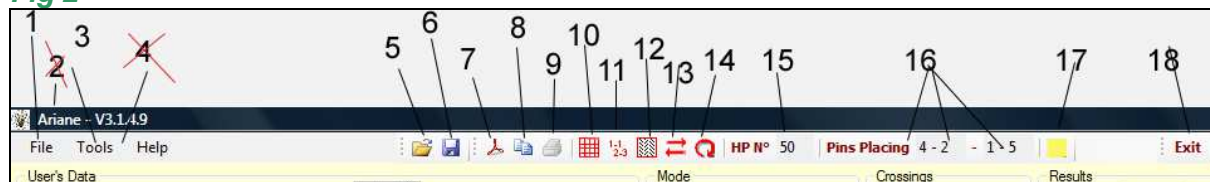


Fig 3

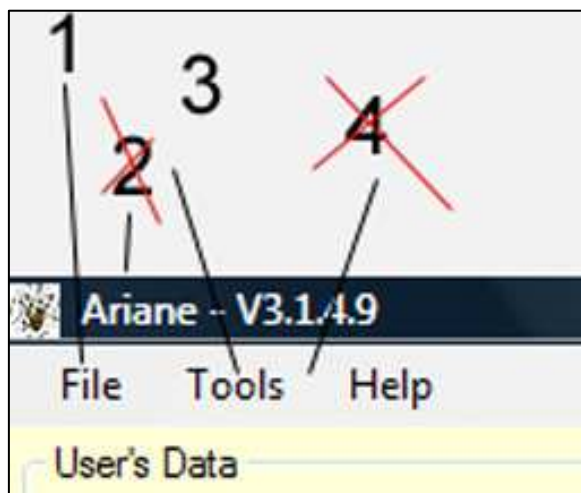
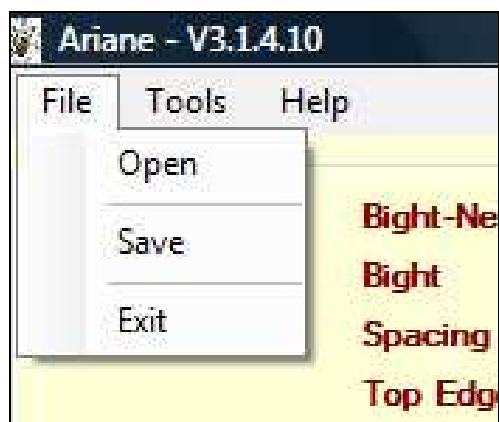


Fig 4 FILE

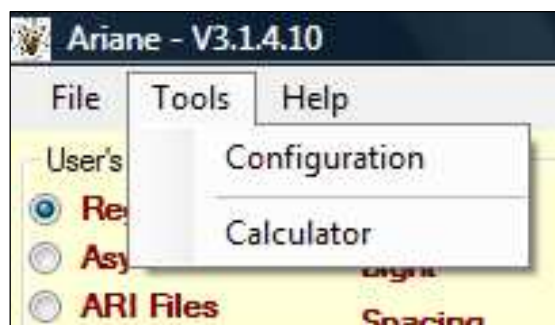


File three items : **Open**, **Save** and **Exit**
Save & Quit are self-explaining.

Open is used to open the . **ARI** file of a knot that was saved by user or sent to him.
 ARI files are a light, swift and powerful tool of exchange with others knots tyers owning a licensed copy of ARIANE. (very useful to archive knots too)
ARI format has evolved, **ARI files made with V1 and V2** can be opened by Ariane **V3** but **ARI** made with Ariane **V3** can **only** be opened by Ariane **V3**.

Edition (here numbered 2 in **Fig 3**) In V2 that stayed just an empty box so it is now deleted.

Fig 5



Tools : two items

Configuration : **This panel has been changed in no small way.**

Fig 6

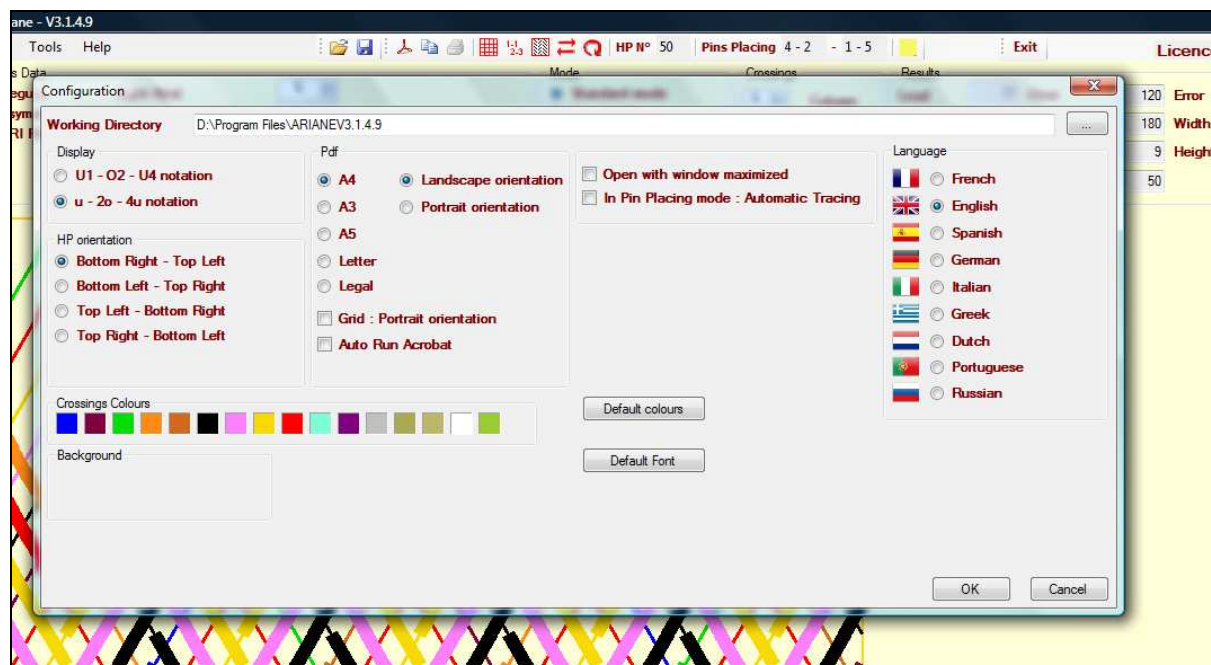
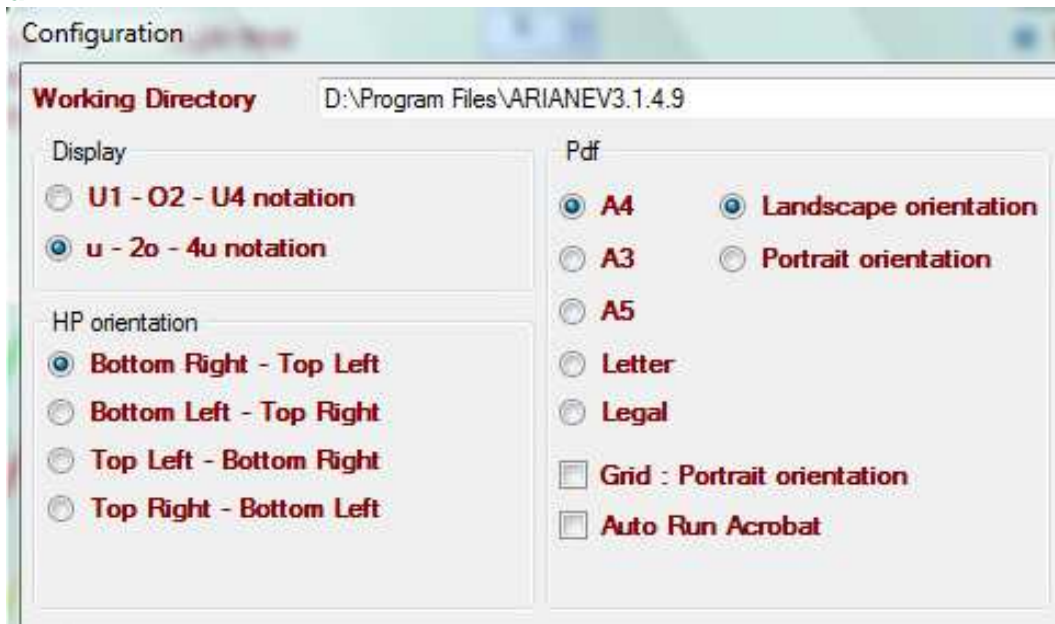


Fig 6-a



The standardised, normal for RIGHThanded persons, direction for **ODD-NUMBERED H-P** is **BOTTOM RIGHT** to **TOP LEFT**. (For LEFThanded person the normal direction is **BOTTOM LEFT** to **TOP RIGHT**. All other directions are ABERRANT'.)

DO NOT FORGET TO ALWAYS SET THE CORRECT WORKING DIRECTORY as files will be saved into the folder indicated here.

Fig 6-b



Open your Ariane a first time, close it then open it again: the language should then be the language of your Windows Operating System.

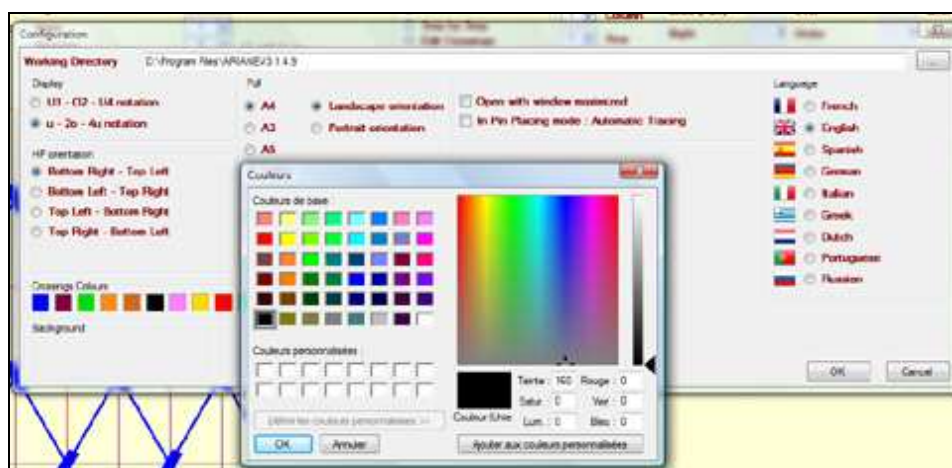
Fig 6-c



Crossing Colours :From **LEFT** to **RIGHT** : this is the order in which the colours will be attributed to the STRANDS.

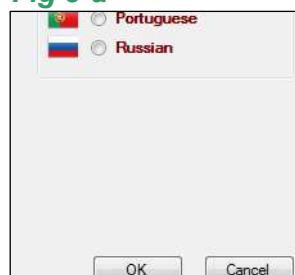
Background is for choosing the background colour of the GRID area.

Fig 6-c-bis How to modify the choice of colours.



Clicking on a “coloured square” will open a panel which will allow you to attribute a new colour to the “square” that has been clicked on.

Fig 6-d



Cancel is obvious

OK is the button you **NEED TO ACTIVATE IN ORDER TO MEMORIZE WHAT WAS DONE IN CONFIGURATION**. Using the **X** on red background at the top right corner of the panel will close it but you will lose your modifications.
Any modification of the language needs that you close ARIANE and open it again so the modification can be ‘saved’ and acted upon. All other modifications are acted upon immediately inside the same session.

Calculator: *Fig 7* **GIVEN “ AS IS”**

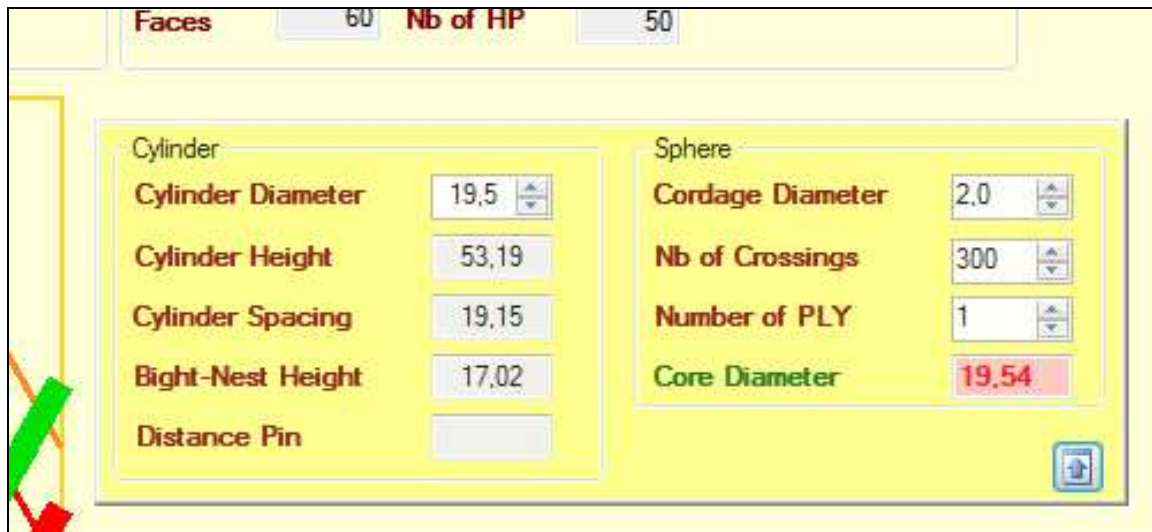


Fig 8 **HELP** same as in V2

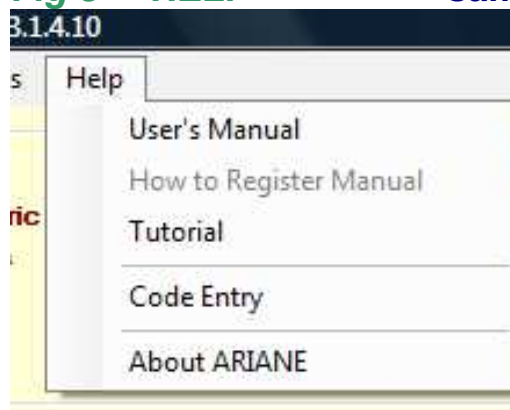


Fig 9 same as in V2



N⁵ **Open** : Open the **working directory**.

N⁶

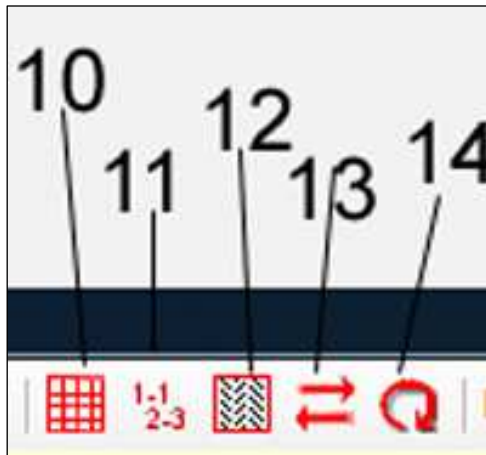
Save in the designated **working directory** a file in **.ARI** file format that contains the knot's characteristics and can be open again in Ariane: It is the privileged mean to exchange knots or to archive them.

N⁷

The **'instant tutorial'** : writes a **.PDF** file that contains the table of HP codes and the knot grid as

it is on the screen. (see the Tutorial for a 96 FACES spherical cover made by Claude HOCHET using grid and the table of HP coding produced by ARIANE).

Fig 10 same as in V2



N°8 Makes a **copy** of the grid to the clip board.

N°9 **Print** may be this one will be suppressed.

Fig 6

N°10.

Traces the COLUMNS and ROWS LINES.

N°11 Shows (or not ; by inversion of the situation) the PINS notation.

N°12 Shows (or not ; by inversion of the situation) the crossings.

N°13

Inverts the crossings **U** for **O** and **O** for **U**

N°14

Changes the orientation of the traced grid, of the **IMAGE** of it only : **PORTRAIT / LANDSCAPE** or **VERTICAL CYLINDER FRAME OF REFERENCE / HORIZONTAL MANDREL FRAME OF REFERENCE**

Fig 11 same as in V2



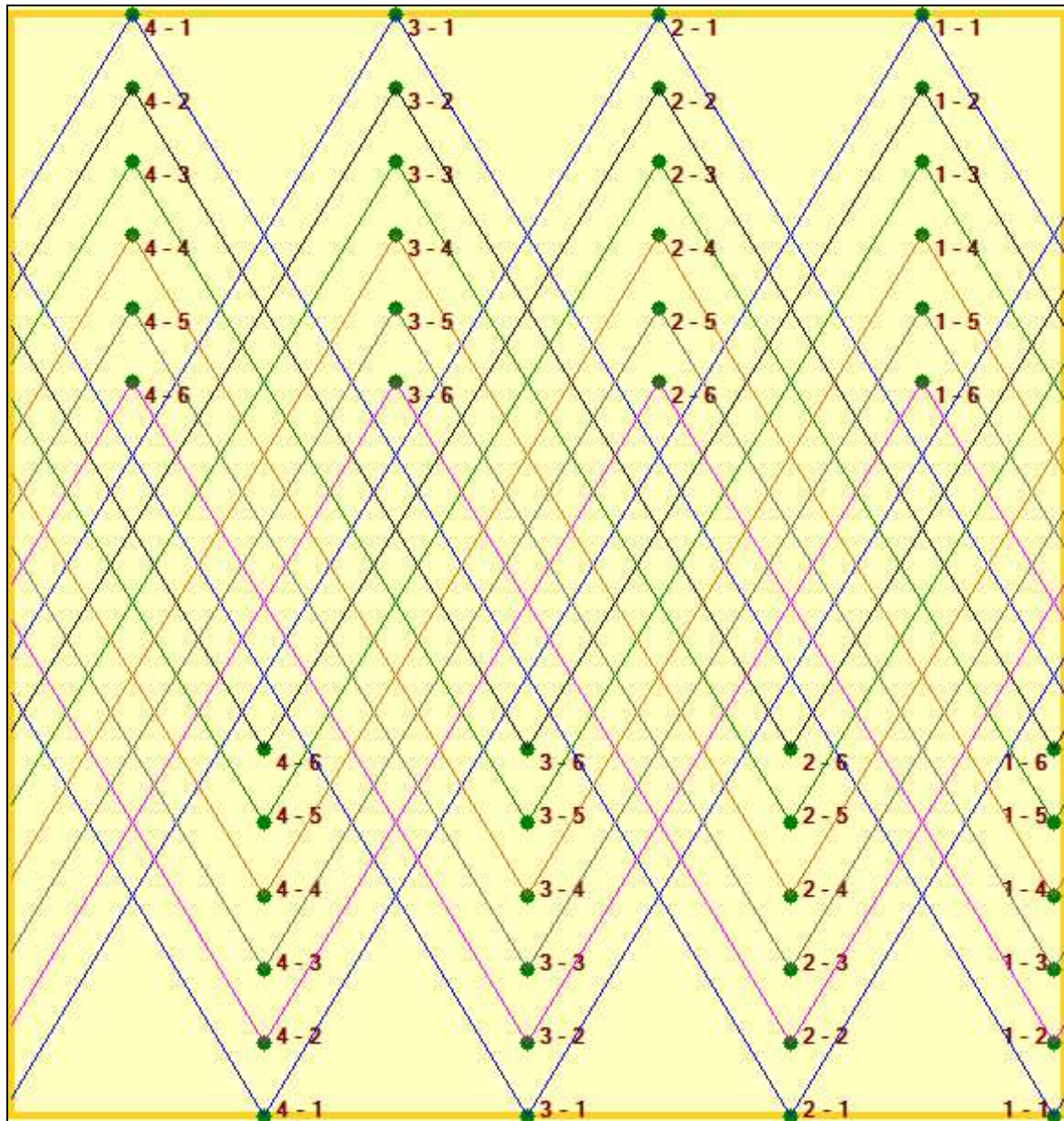
N°15

N°HP , Number of the HALF-PERIOD.

N°16

Start PIN and **Arrival PIN** for the HP.

Fig 12 the PINs notation. same as in V2 (here standardised or NORMAL direction of ODD numbered HP is the choice made)



The numbering is **PIN** number – **BIGHT-RIM** number.
 4 - 6 means 4th PIN on the 6th BIGHT-RIM.

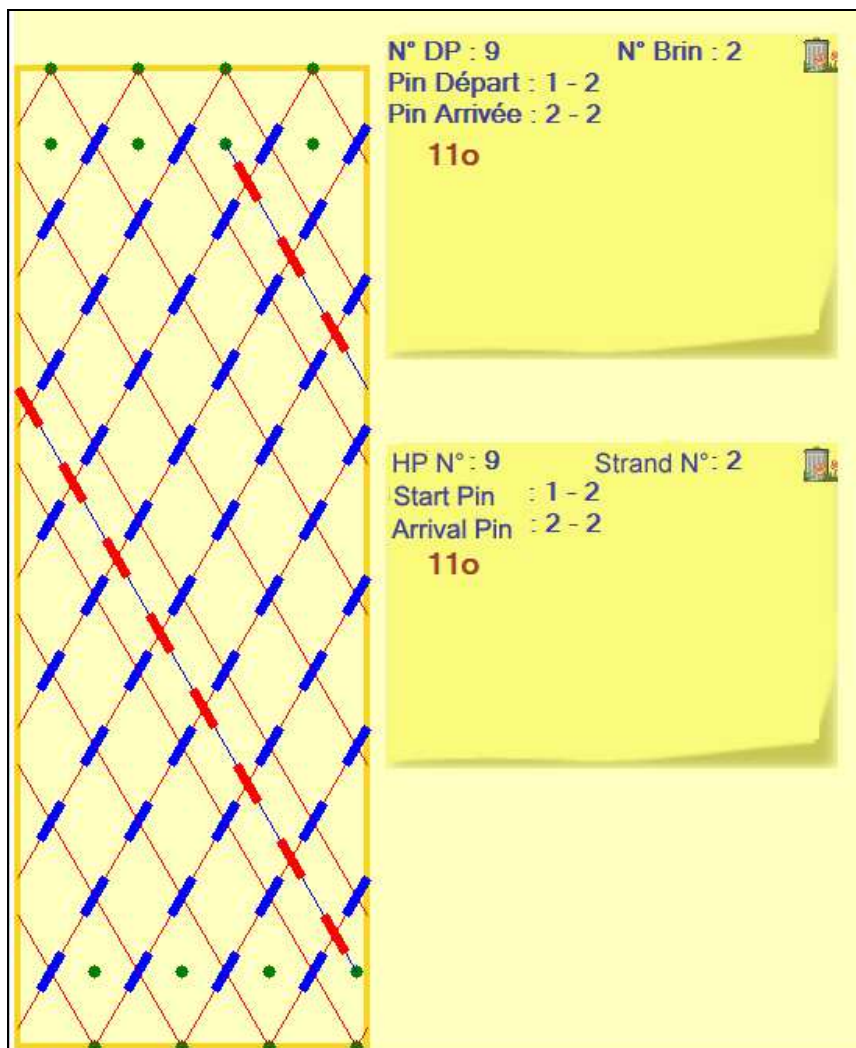
Fig 13 same as in V2



N°17 This is the 'POST-IT" icon just like in **RKnot Builder**.

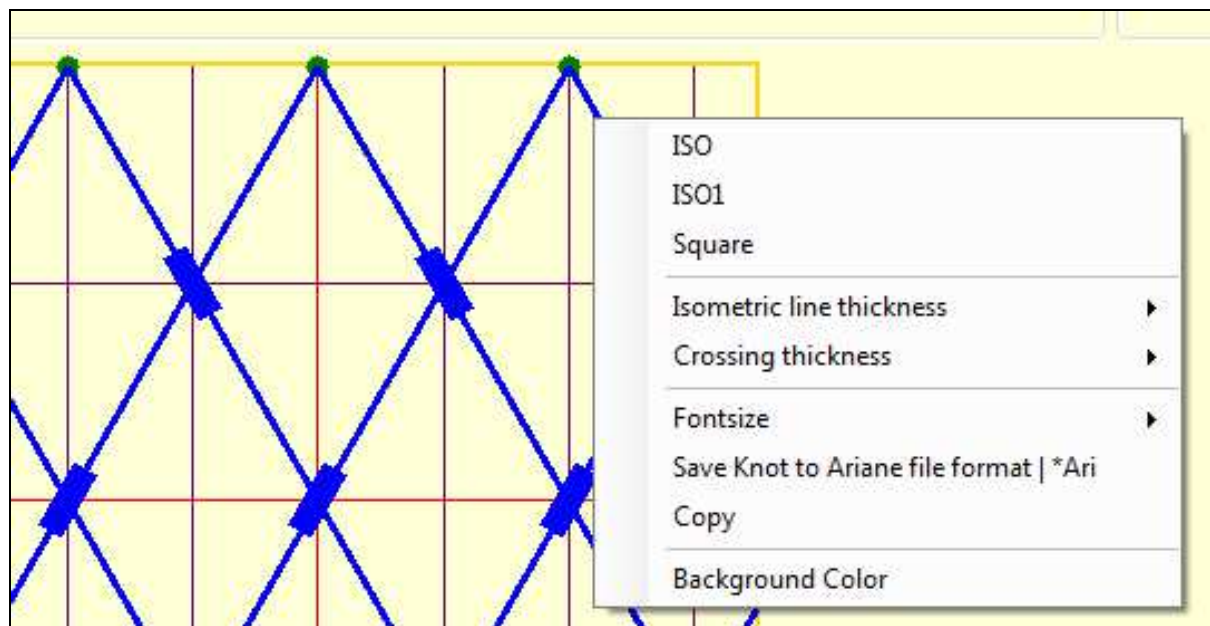
N°18
This is one « quits » the application.

Fig 14 THE POST-IT. same as in V2



Post-it is useful when in **STEP by STEP** mode when making a knot.

Fig 15 the contextual menu. **Changes were made here too.**



The **CONTEXTUAL MENU** can be opened with a **RIGHT** mouse **click** in the main area of the window.

The first « block”: **ISO**, **ISO1** and **Square** gives the opportunity of **choosing the type of the TRACING GRID** that will be used.

The second block is for the **choice of the width or thickness of the lines** traced.

The third ‘block’ gives the choice of

*** the **Font Size**.

*** **Saving the knot on screen in a .ARI format file**

*** **Copy** : copy the image of the grid to the clipboard. You can then paste it in image manipulation software.

A fourth block offers the setting (also in **Configuration Panel**) of the **background colour** of the grid area.

The **LENGTH OF CROSSINGS** can be **MODIFIED BY USING THE MOUSE WHEEL** while the mouse pointer is positioned inside the grid frame.

Fig 16 (top left hand side of the window.) much changes were made here.



Regular: Regular Symmetric Nested-Bight Cylindrical Knot - report yourself to **V2** manual (even V1) for definition.

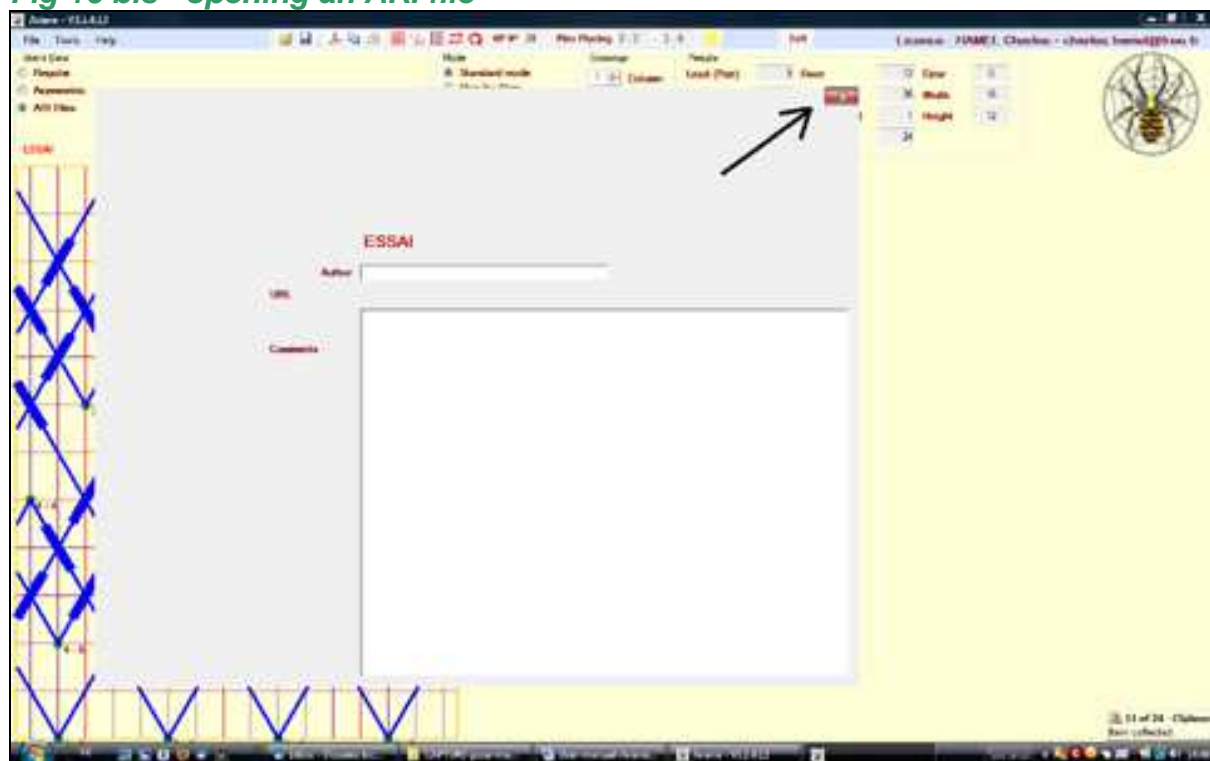
ASYMMETRIC: Regular Asymmetric Nested-Bight Cylindrical Knot - report yourself to **V2** manual (even V1) for definition.

ARI files NEW. This choice is for when you want to load a knot of which you already have the user created ARI file ; knot will open “directly”.

When an **ARI** file is opened a panel open as shown in **Fig 16 bis**.

This panel is closed by clicking on the **X** in the top right side of the grey panel.

As in **V2** if case **HP Coding** is checked then instead of the grid it is the **HP** after **HP table of crossing coding** which is put on screen.

Fig 16 bis opening an ARI file

ARI files can now be commented and signed with the name of their author.
An URL can be indicated.

While using an **ARI** file you may open again the INFORMATION Panel with a **LEFT** mouse click on the NAME of the **ARI** but you will not be able to make any modification in that panel at that stage ; modification are to be made only during the SAVING of the **ARI**.

Slide-Ruler : **NEW**. This addition allows user to change the size of the drawn grid

The rest:

Bight-Nest, Bight, Spacing, Top Edge Bight Offset and **HP Coding** are exactly like in **V2**

Those fields are just as they were in **V1** and **V2** :

Bight-Nest

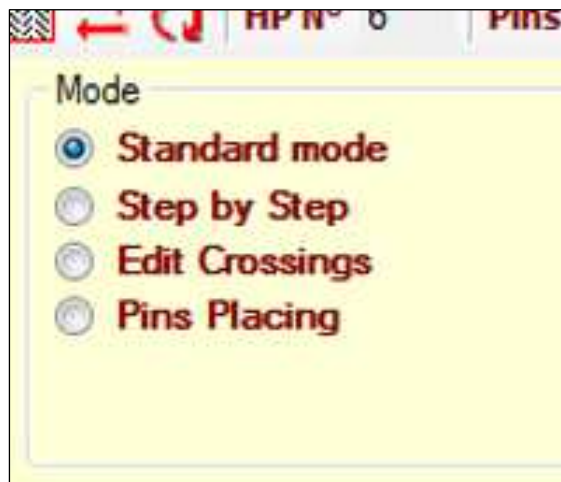
Bight (in a nest)

SPACING or Schaaque's distance 'x' : the distance in ROW INTERVAL (vertical cylinder frame of reference) between the two innermost BIGHT-RIM.

Top Edge Bight OFFSET (a bit different from Schaaque's **DELTA** for those knots.)

Users make their entries in those fields using the “UP & DOWN” arrows.

Fig 17 (top middle left) **NEW**



Standard mode : this is the usual or 'normal' mode in which users enter the parameters using the Up&Down arrows

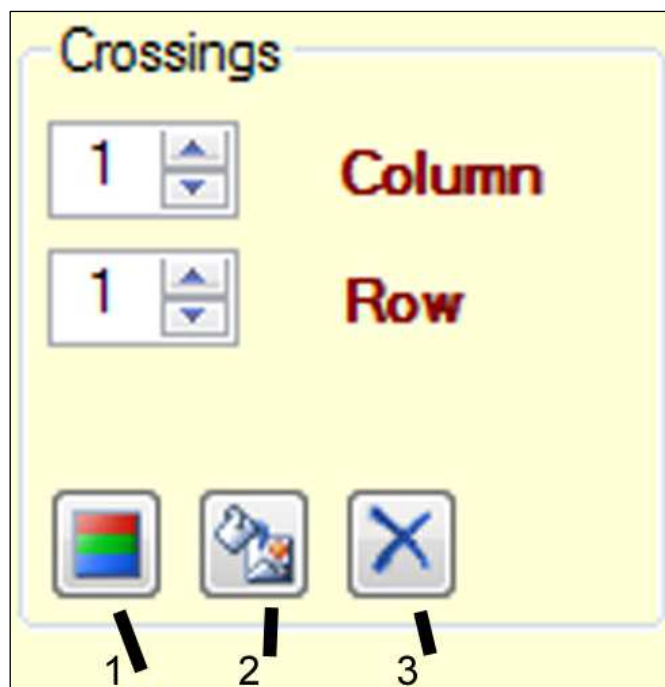
Step by Step : This run **Half-Period** after **Half-Period** of a knot fully made and on screen. Of course the **HP** orientation chosen in **Configuration** is at work here.

You can also do a Step by Step which is **STRAND by STRAND** instead of HP by HP with **CTRL + LEFT mouse click**

Edit crossings : **NEW**. In this mode you can edit in a multi-form manner the **TYPE** and **COLOURS** of the crossings

Pins Placing : **NEW**. In this mode you manually enter the pins at the proper places (determined by your planning of the knot) to create a grid.

Fig 18 (top middle right) ENTIRELY NEW



**Column
Row**

This modify the **CODING PATTERN** by a « set sequence ». Instead of the Up & Down arrows you may activate the field by positioning the index in it and use **CTRL + Mouse Wheel** to increment or decrement the number entered.

Icon 1 : Automatic colouring, each **CROSSING** takes the colour of the **STRAND** making the **OVER**

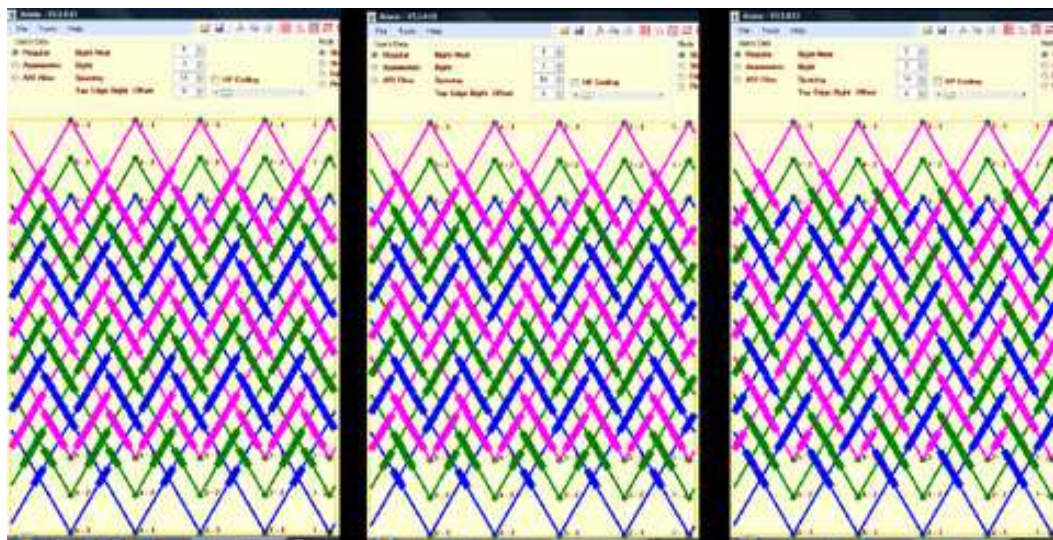
Icon 2 : All crossings are coloured in the 'base' **blue**.

Icon 3 : Reset matrix to (all changes are lost)

.U1-O1

.all crossings are coloured in basic blue

Fig 18 annex ENTIRELY NEW



In the three grids in **Fig 18 annex** the parameters : bight-nest, bight, Spacing, Offset, and setting of Column are EXACTLY THE SAME, they are unchanged but the grid **DISPOSITION OF CROSSINGS** is changed by changing the "starting point of the application" of the setting with 3 value for **Column**.

This starting point is modified by putting the mouse pointer in the drawing area and using (slowly !) **CTRL + MOUSE WHEEL**

Fig 19 (top right hand side of the windows) same as in V2

Results					
Lead	<input type="text" value="7"/>	Over	<input type="text" value="9"/>	Error	<input type="text" value="0"/>
Bight	<input type="text" value="3"/>	Under	<input type="text" value="9"/>	Width	<input type="text" value="6"/>
Crossings	<input type="text" value="18"/>	Nb of Strand	<input type="text" value="1"/>	Height	<input type="text" value="7"/>
Faces	<input type="text" value="18"/>	Nb of HP	<input type="text" value="6"/>		

Results are shown here as in **v2**, they were just moved there.

Lead .

Faces == a Face may be made with several crossings.(Xing)

Crossings

Bight

Over = OVER Xing

Under = UNDER Xing

Nb HP == NUMBER OF HALF-PERIODS.

Nb of Strand == NUMBER OF STRANDS (can be single strand or multi-strand.)

Width = of the grid

Height = of the grid (help for Pin Placing for example)

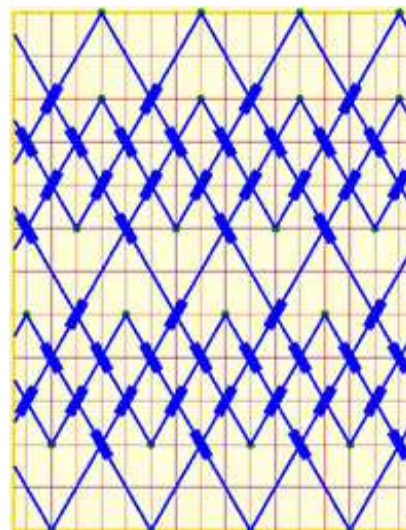
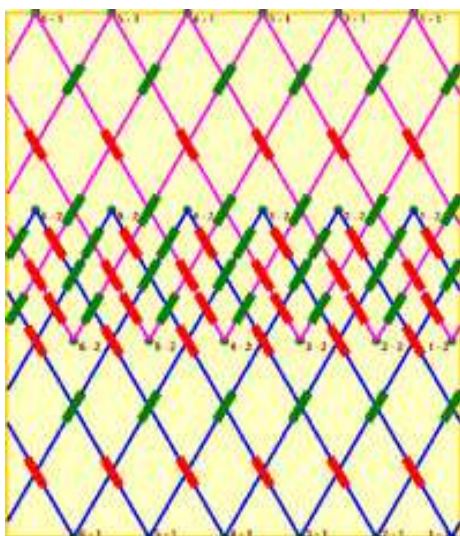
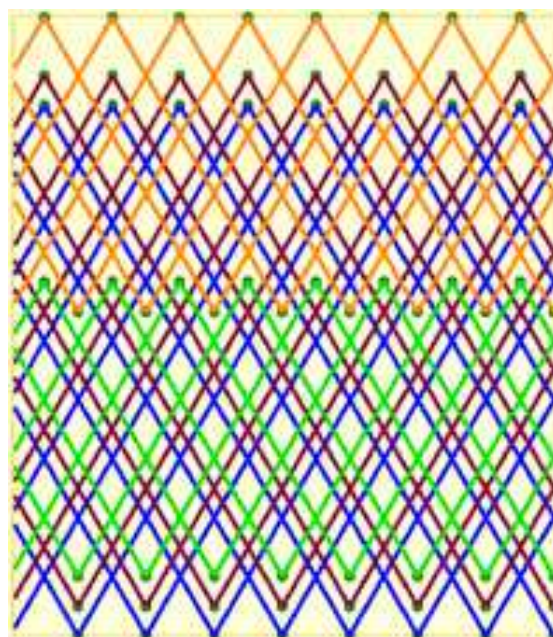
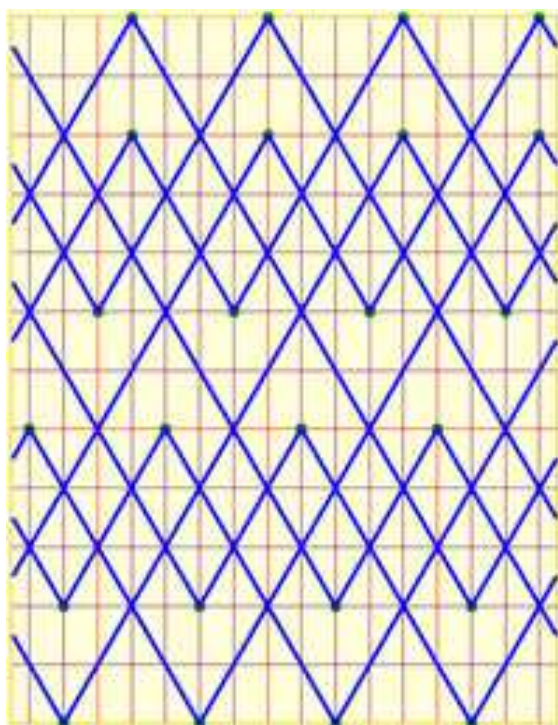
PINS PLACING MODE

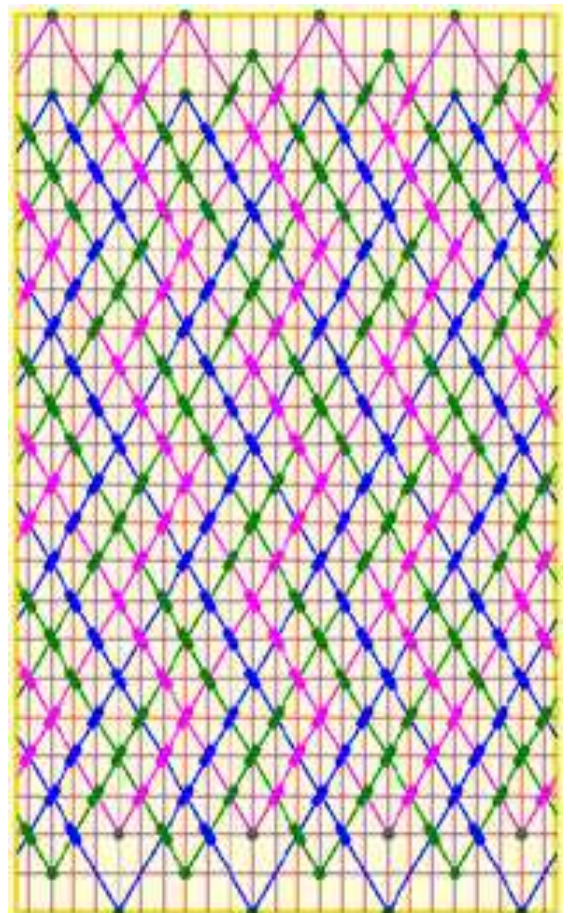
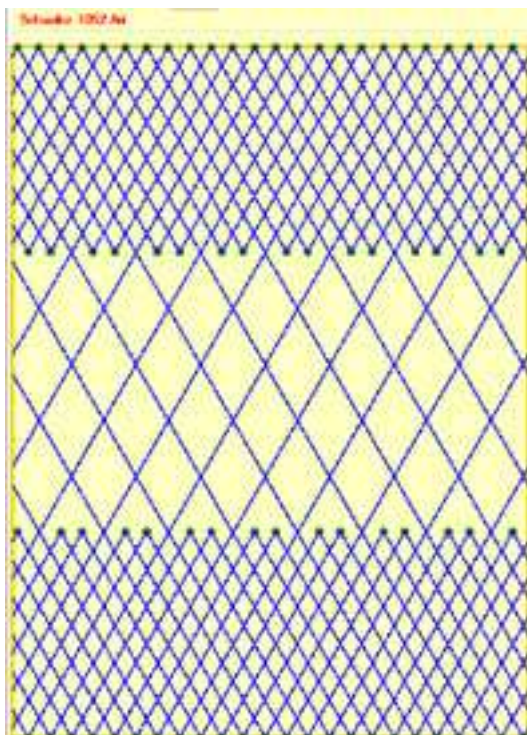
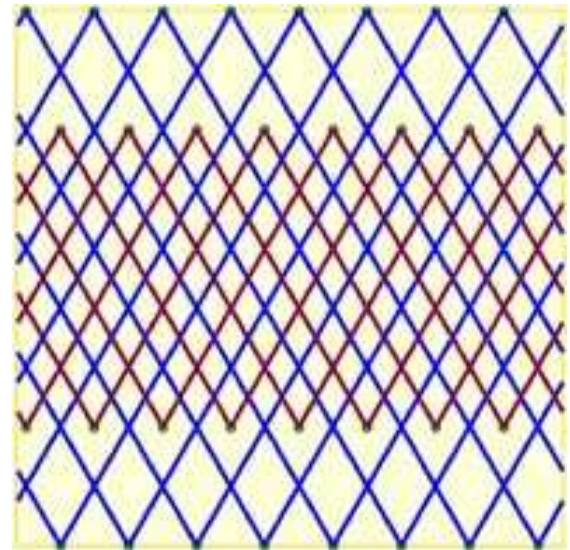
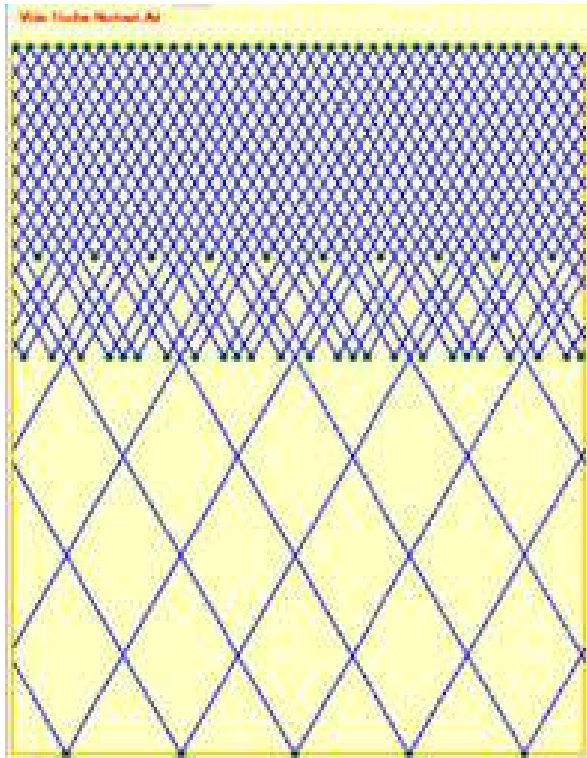
This is the **ONLY WAY TO MAKE** knots that are not amenable to the automated treatment: in other words knots **THAT DO NOT BELONG TO**

- REGULAR CYLINDRICAL
- SEMI-REGULAR CYLINDRICAL
- **REGULAR** SYMMETRIC *NESTED-BIGHTS* CYLINDRICAL
- REGULAR **ASYMMETRIC** *NESTED-BIGHTS* CYLINDRICAL

Please refer to V2 user's manual for details.

A few examples of knots that **CANNOT** be made **WITHOUT MANUAL PINS PLACING** :





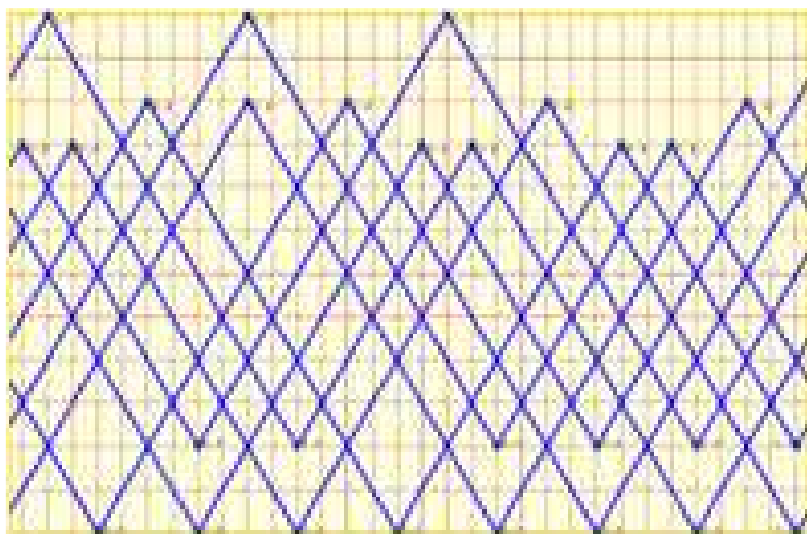
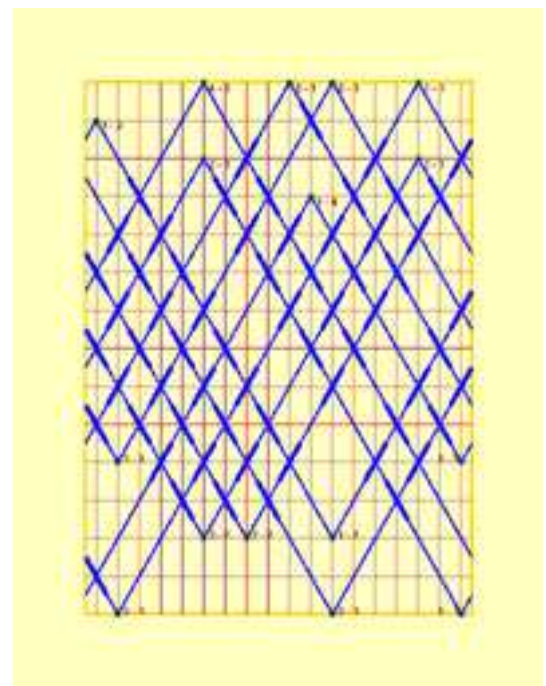
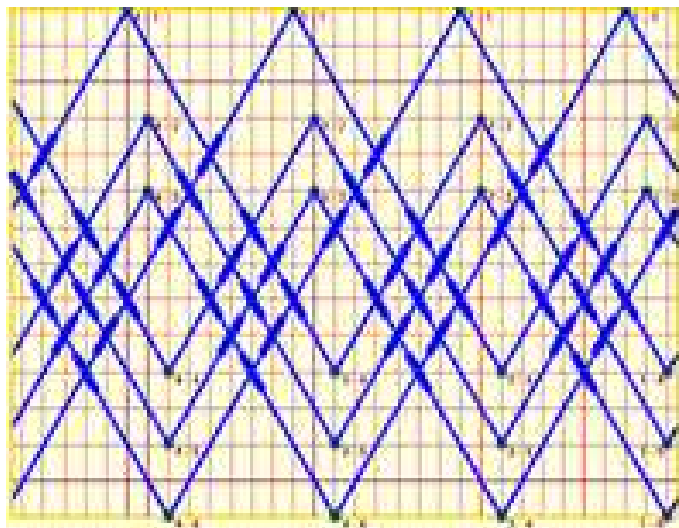
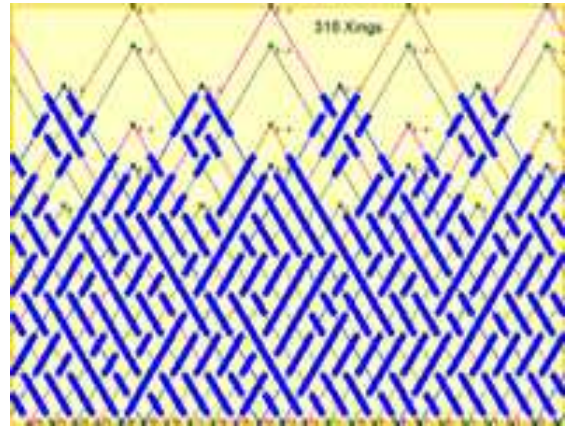
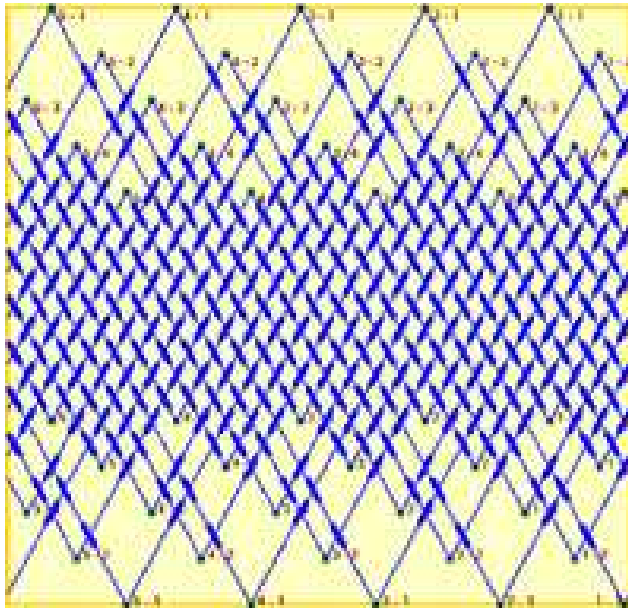
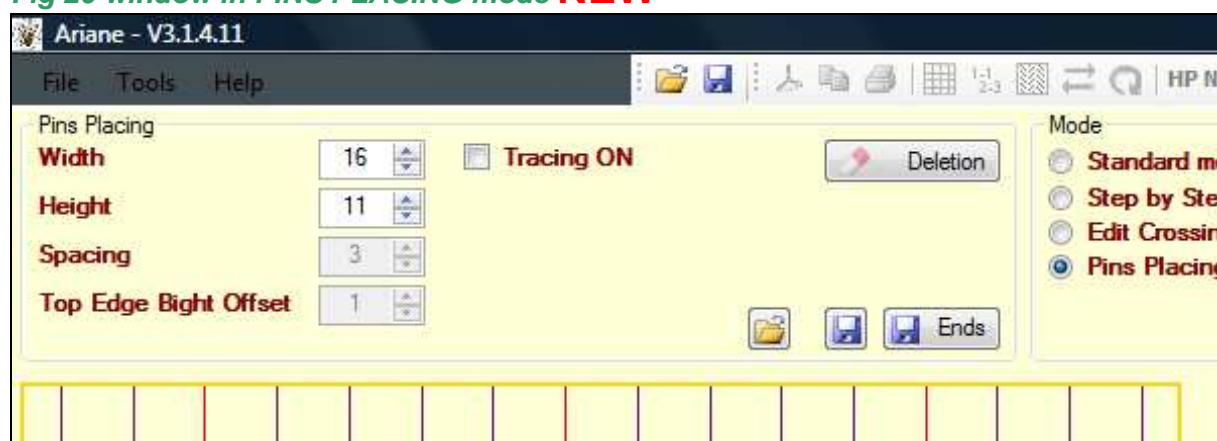


Fig 20 window in PINS PLACING mode NEW



This is how the screen is when the **PINS PLACING** radio button is selected.

Deletion button : the grid is reset, the drawing is lost but you stay in **Pins Placing** mode.

Icon opening yellow folder :  loading an existing file for working on it again or for modification.

At regular interval "intermediate files" are saved during the making of a grid. Look for them in the directory that has been set in **Configuration** as **Working Directory**.

Icon floppy disk image :  An **automated Back-up** of the knot in progress without exiting the "pins placing" mode is at work, those files are saved in the **Working Directory** you have defined in **Configuration** Panel. From the first pin placed a file is saved : SauvegardeTmp0.Ari ; after that every 4 pins a file is save with the rank "x" being incremented by '1': SauvegardeTmp'x'.Ari till 'x' = 15 (16 files saved) then it is again a cycle from "0".(NO WARNING is given that a new cycle is beginning and that the previous file of same name is replaced).


Each time you enter the **Pins Placing mode** the saving starts anew with x = 0 so if you want to keep the existing files existing prior to that new session of **Pins Placing mode** put them where they will be safe or rename them.

Using the **floppy disk image**  you make **your own voluntary** saving of the state of the grid.

Those files can be load again using  the folder open icon.

If when in **Pins Placing mode** you check the radio button for **Standard mode** then the knot in progress is lost, when in **Normal** or Standard screen you have on the screen the current knot that was there when you went to **Pins Placing mode**.

Still the SauvegardeTmp'x'.Ari files that were saved are still available in the **Working Directory**.

Icon of floppy disk  image plus Ends : Back-up the current knot (in progress) and return Ariane to **Standard Mode** putting on screen the built knot.

Tracing on : if the cell is checked then **Automatic tracing** is **ON**.

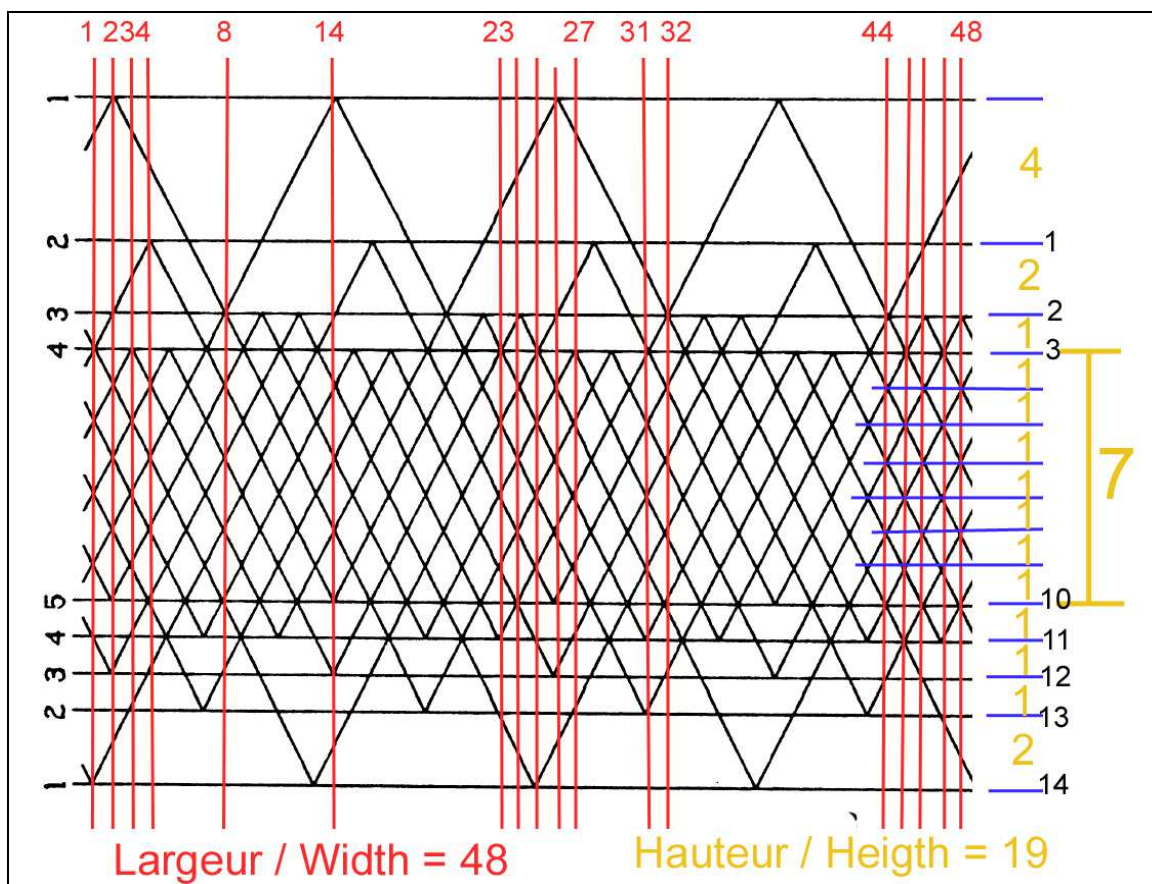
In the **Configuration Panel** you may chose the option of always beginning:

EITHER with **Automatic tracing** is **ON** when the cell is checked

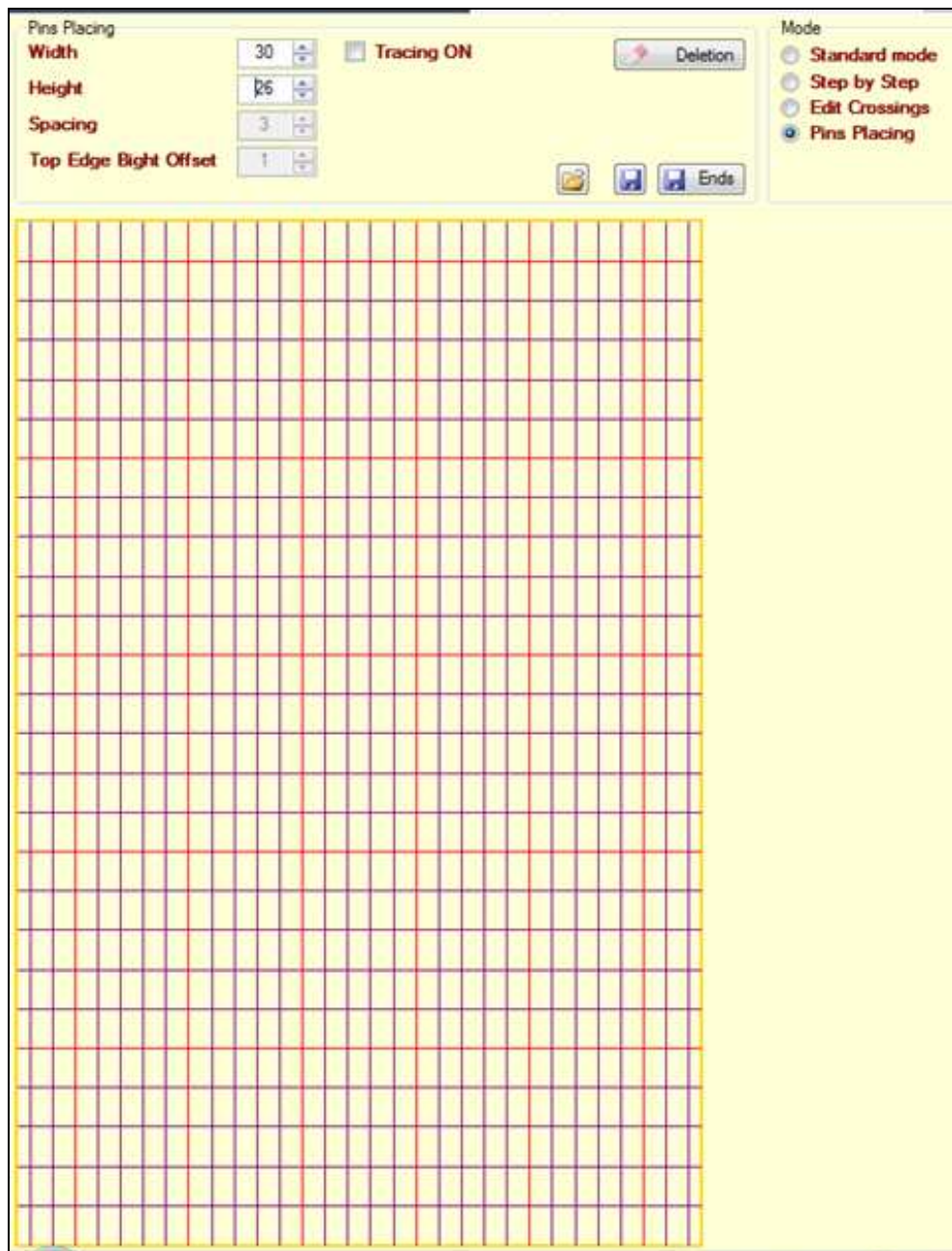
OR with **Automatic tracing** is **OFF** when the cell is unchecked.

LET US SEE SOME NOTIONS THAT ARE NECESSARY FOR THE MANUAL POSITIONING OF THE PINS (much more details are in V2 User's manual)

Fig 21



The fast and sure way to get a correct drawing and to get the grid measurements is to use an **ISOMETRIC GRID**.

Fig 22 mode PINS PLACING window**REMEMBER THIS POINT :**

PINS PLACING **MUST ABSOLUTELY COMPLY** with the **HP ORIENTATION SET** in the **CONFIGURATION Panel**.
(orientation of the **ODD NUMBERED HP** in each case)

This chosen ORIENTATION WILL ALSO APPLY TO HOW THE NUMBERING OF THE PINS IS DONE (never forget to **EXPLICITLY** state your chosen orientation when exchanging knots)

BOTTOM RIGHT – TOP LEFT (the standard one --normal for **right** handed persons.)

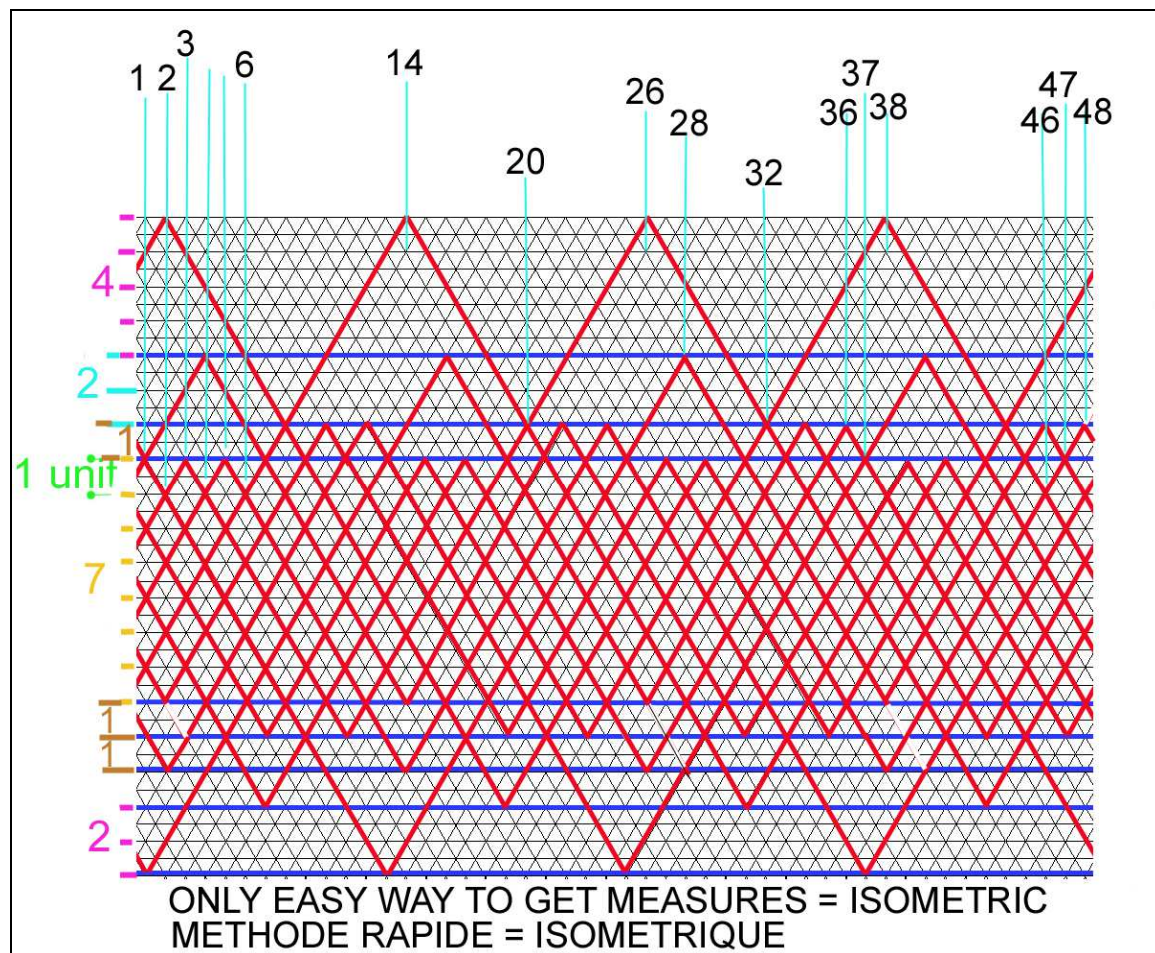
BOTTOM LEFT –TOP RIGHT (normal for **left**-handed persons)

And the **two ‘ABERRANT’** (if interested, read <http://tinyurl.com/cgzi778> in particular page 7 : handedness and how humans function)

TOP LEFT –BOTTOM RIGHT

TOP RIGHT – BOTTOM LEFT

Fig 23



There are TWO WAYS to place the pins :

*** With **AUTOMATIC TRACING** of the HP **“ON”** (case checked)

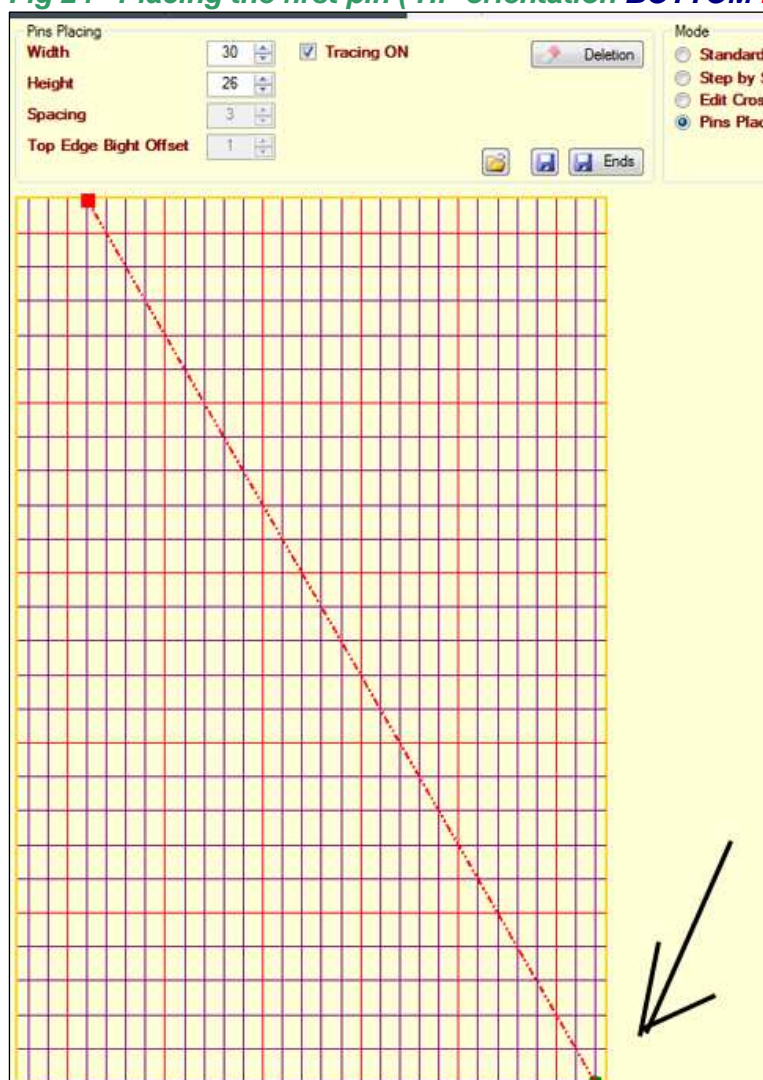
*** With **AUTOMATIC TRACING** of the HP **“OFF”** (case unchecked)

When tracing is “**ON**” then you **must** work with method and order: enter the **HP** in their normal order of development (do not forget the orientation set in **Configuration Panel**) and comply with the numbering of the BIGHT-RIMS on each KNOT BORDER. (see again **V2** manual if you are lost here).

When tracing is “**OFF**” (counseled **only** for the most adept with Ariane and knowledgeable about nested-bight C.K!) then you enter the pins in the proper place but in the order you want.

TRACING OF THE HP “ON”

Fig 24 Placing the first pin (HP orientation **BOTTOM RIGHT – TOP LEFT**)



Words to the wise :

*** ALWAYS *** prepare a paper plan of your knot (use Isometric grids if you want it easy) to get your measurement and the tracing you want, ARIANE cannot work intelligently if you are not, yourself, giving intelligent orders.

In **Fig 24** the first pin was entered (complying with HP orientation) at the **BOTTOM RIGHT** by positioning the mouse pointer at the chosen place and making a **left click** (another **left click** on a pin already existing will erase it and delete what putting that pin in place had yielded)

Placing the pin immediately results in having the **HP** traced to the very top **BIGHT-RIM** as can be seen in **Fig 24**.

Now, according to your prepared grid, you place the “arrival pin” at the meeting of the BIGHT-RIM of interest and of the “proposed” **HP**: this is what was done in **Fig 25** with the result that the **HP** between the two last pins placed is now ‘confirmed and is in “full thickness” and the following “proposed” **HP** is traced.

And so on....

Clicking on that already placed "arrival pin" will erase it and allow the correction of a mistake.

To erase the whole grid use the **DELETION** button.

To save the grid "in the making" use the proper icon.

It is possible to double the length and width of the grid (without changing the number of "units") by putting the mouse pointer on it and using **ALT + Left mouse CLICK**.

Fig 25 placing the second pin

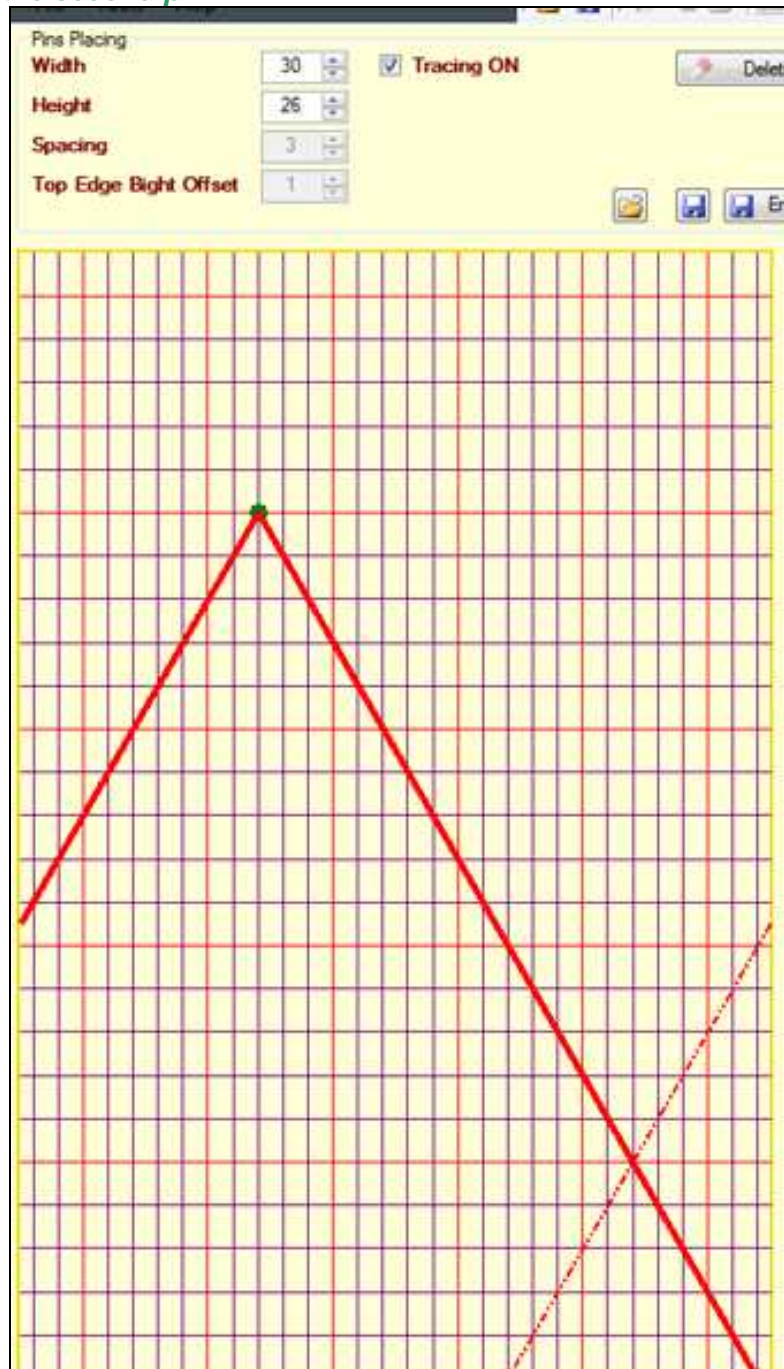


Fig 26 Using PINS PLACING mode to make the blue grid height=12 width=16

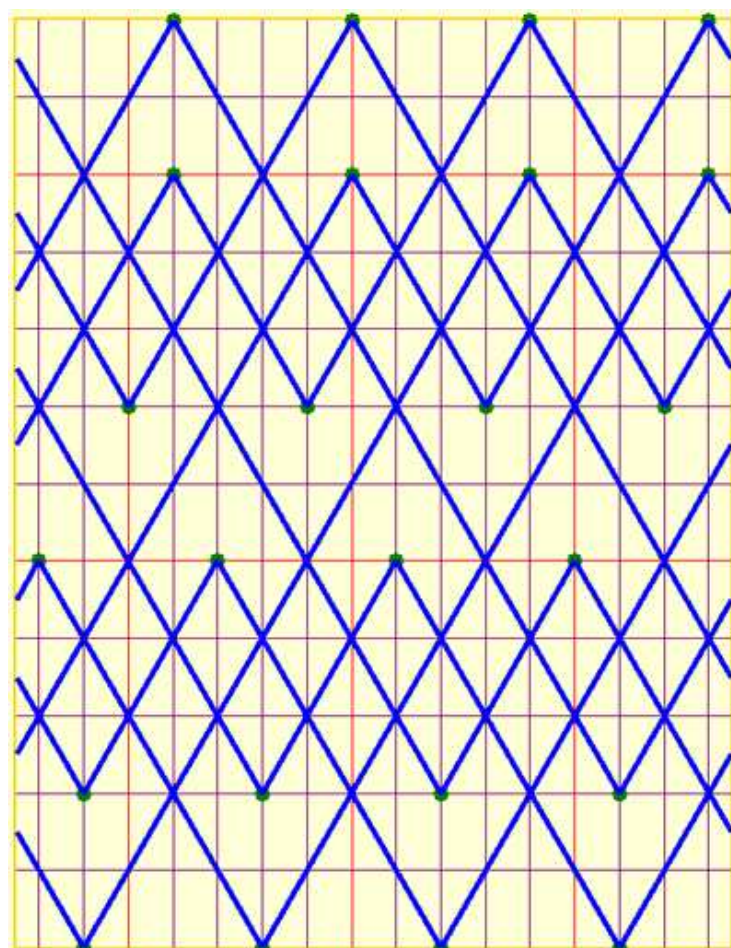
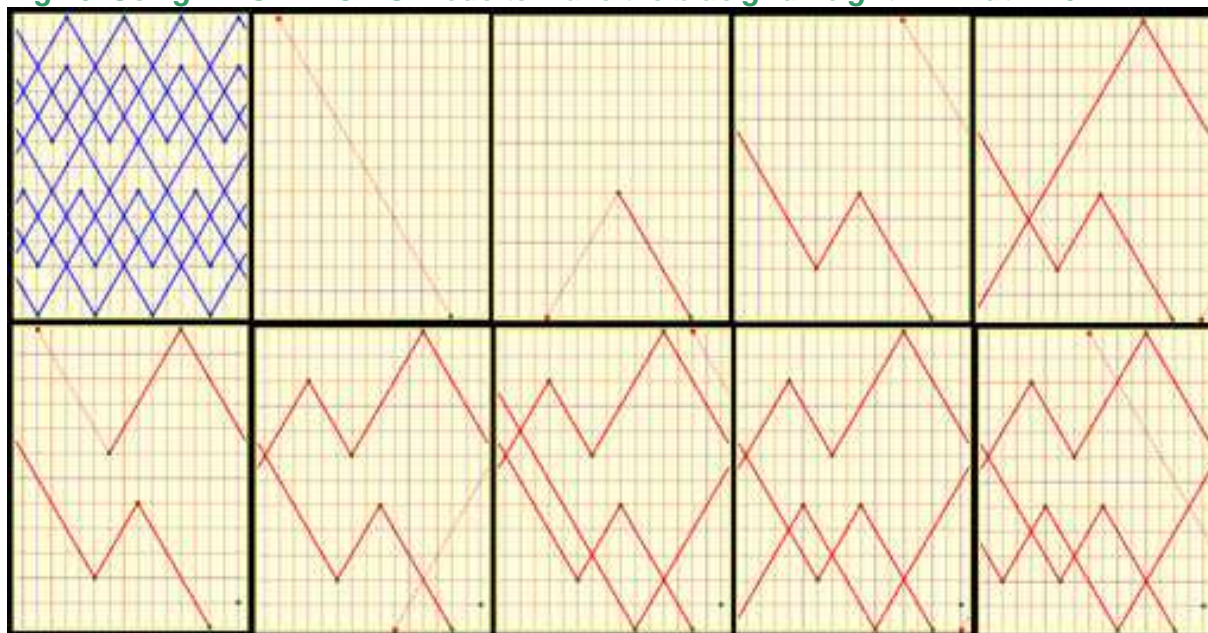


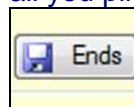
Fig 26 bis

Using **Fig 26** you can easily imagine what is happening on the screen.

It is suggested that you do that grid as a training exercise.

Fig 26 bis is the template you are supposed to have prepared on paper using an isometric grid.

When you are finished with placing all you pins then use the



icon to return to Standard mode while saving the **.ARI** file of your grid.

If you are not finished use the



other floppy disk icon to save an intermediary **.ARI** file that can be completed later.

TRACING OF THE HP “OFF”

As the tracing is **OFF** you may not stay constrained to follow a **HALF-PERIOD** by **HALF-PERIOD** order but place the **PINS BIGHT-RIM** after **BIGHT-RIM**

The hard way is to place each pin in turn or “**ONE BY ONE**”.

The easy way (**IFF** you have a really good isometric grid prepared and verified) is to use the “**automated pacing**” of pins placing.

On each **BIGHT-RIM** (remember that you must comply with the orientation of **HP** set in **CONFIGURATION** Panel, the numbering of the pins will follow that setting too)

----- BOTTOM RIGHT – TOP LEFT (the standard one -- for RIGHT-handed persons.)

Pins are placed on each **BIGHT-RIM** from **RIGHT** to **LEFT** - the **ODD** numbered **HP** starting on one **BIGHT-RIM** at the **BOTTOM KNOT EDGE** and arriving on one **BIGHT-RIM** at the **TOP KNOT EDGE**

----- BOTTOM LEFT –TOP RIGHT (for LEFT-handed persons)

Pins are placed on each **BIGHT-RIM** from **LEFT** to **RIGHT** - the **ODD** numbered **HP** starting on one **BIGHT-RIM** at the **BOTTOM KNOT EDGE** and arriving on one **BIGHT-RIM** at the **TOP KNOT EDGE**

And the two ‘**ABERRANT**’ (if interested, [read this piece in particular page 7](#) : handedness and how humans function to understand the ‘aberrant’)

----- TOP LEFT –BOTTOM RIGHT

Pins are placed on each **BIGHT-RIM** from **LEFT** to **RIGHT** - the **ODD** numbered **HP** starting on one **BIGHT-RIM** at the **TOP KNOT EDGE** and arriving on one **BIGHT-RIM** at the **BOTTOM KNOT EDGE**

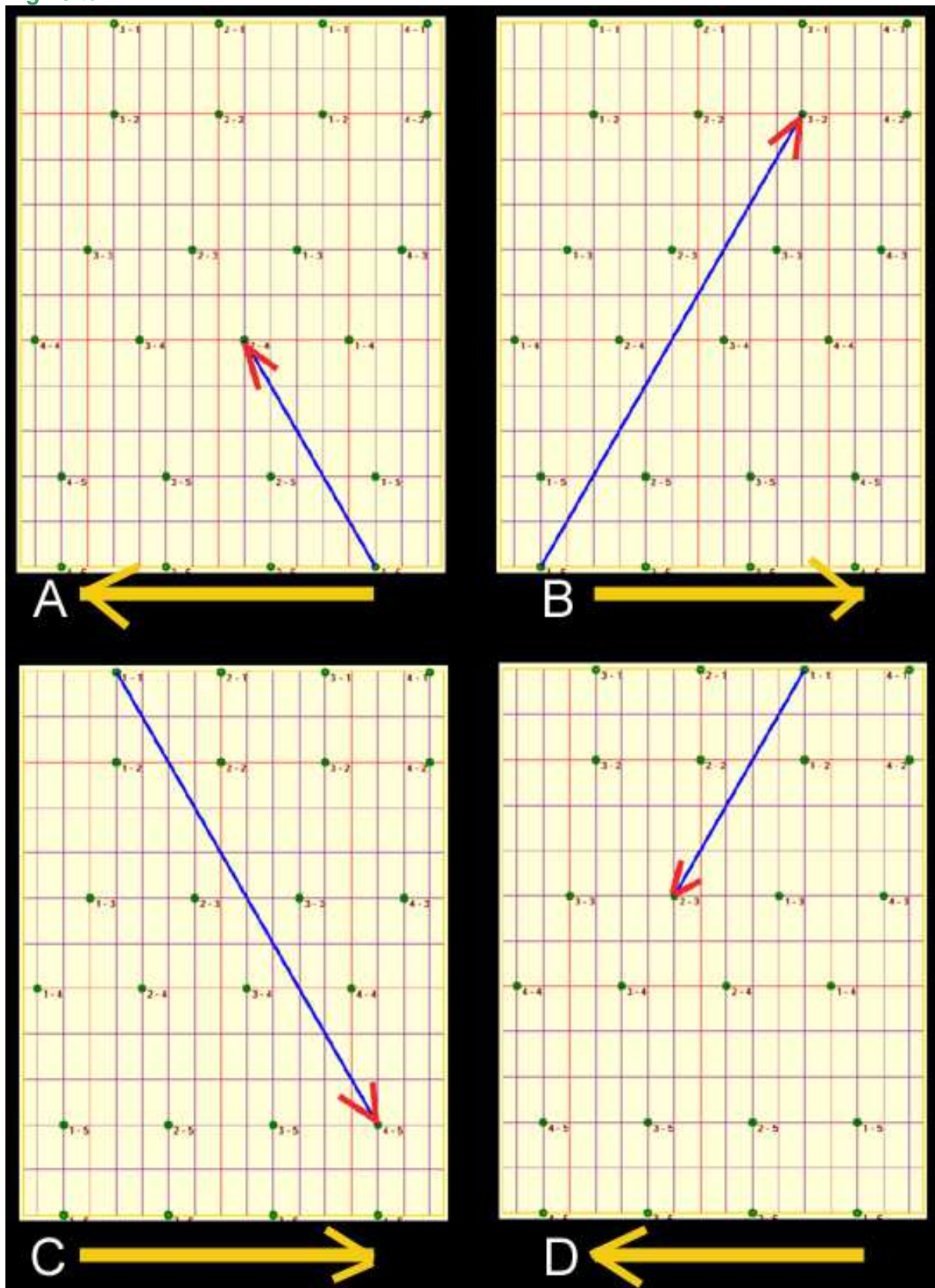
----- TOP RIGHT – BOTTOM LEFT

Pins are placed on each **BIGHT-RIM** from **RIGHT** to **LEFT** - the **ODD** numbered **HP** starting on one **BIGHT-RIM** at the **TOP KNOT EDGE** and arriving on one **BIGHT-RIM** at the **BOTTOM KNOT EDGE**

See example of numbering of pins

In **Fig 26 ter** the direction of the circular (cyclic) numbering of the pins is indicated by the thick yellow arrow. You will note that the “general orientation” of the **FIRST HALF-PERIOD** gives the direction of the numbering (remember the numbering appears to be ‘linear’ but is in fact “circular” as it is made around a cylinder/mandrel).

Fig 26 ter



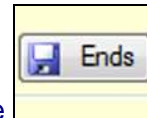
In *Fig 26 ter*

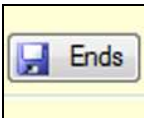
A stands for
BOTTOM RIGHT – TOP LEFT (the standard one – normal for right handed persons.)

B stands for
BOTTOM LEFT –TOP RIGHT (normal for left-handed persons)

C stands for the 'aberrant'
TOP LEFT – BOTTOM RIGHT

D stands for the 'aberrant'
TOP RIGHT – BOTTOM LEFT

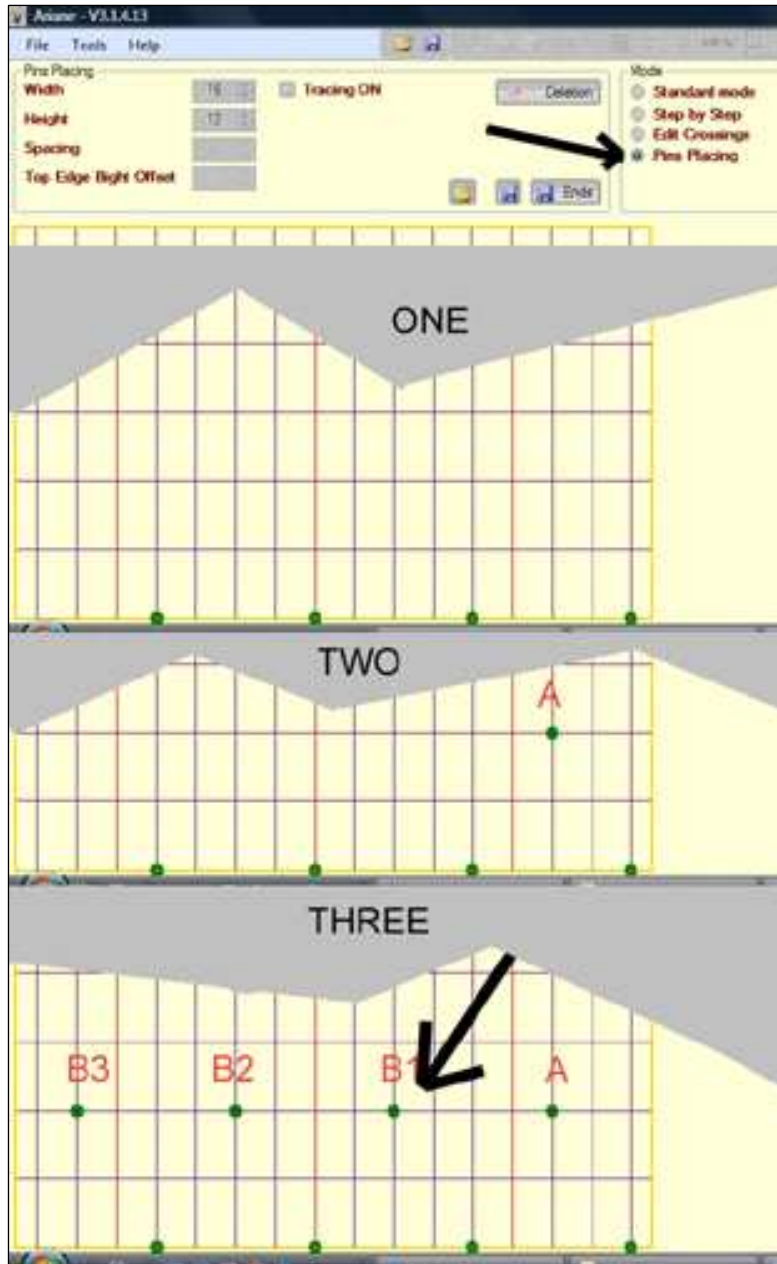


When you are finished with placing all you pins then use the  icon to return to **Standard mode** while **saving** the **.ARI** file of your grid.

If you are not finished use the other floppy disk icon  to save an intermediary **.ARI** file that can be completed later.

How to use the “automated pacing” of the pins placing (tracing may be ON or OFF)

Fig 26 quarter



We are in the situation shown in part **ONE** of : **BIGHT-RIM N°1** of **BOTTOM KNOT EDGE** has received its pins.

ODD numbered HP go from **BOTTOM RIGHT** to **TOP LEFT** so **PINS** are numbered **RIGHT** to **LEFT**.

We now want to place the **PINS** on **BIGHT-RIM N°2** of **BOTTOM KNOT EDGE**.

We are now in part **TWO**, our prepared grid tells us that we need to put a **PIN** in position **A**: we do so by putting the mouse pointer there and making a **LEFT mouse click**.

Now we have still three more pins to place in **B1**, **B2**, and **B3**.

We insert a **PIN** in **B1** BUT not using a simple click but using **CTRL + Left mouse CLICK**. This immediately and simultaneously put a pin in **B1**, **B2**, and **B3**.

IF and ONLY IF you have not made a **click** on another horizontal line then you may **ERASE THE WHOLE** series **A**, **B1**, **B2**, and **B3** **PINS** of **BIGHT-RIM N°2** by a second

CTRL + Left mouse CLICK.

Using **ALT + Left mouse CLICK** on the grid will double the length of the dimensions of the grid (with a limit Height * Width < 40000). When doing that grid resizing the **PINS** already in place will be set again at the right place.

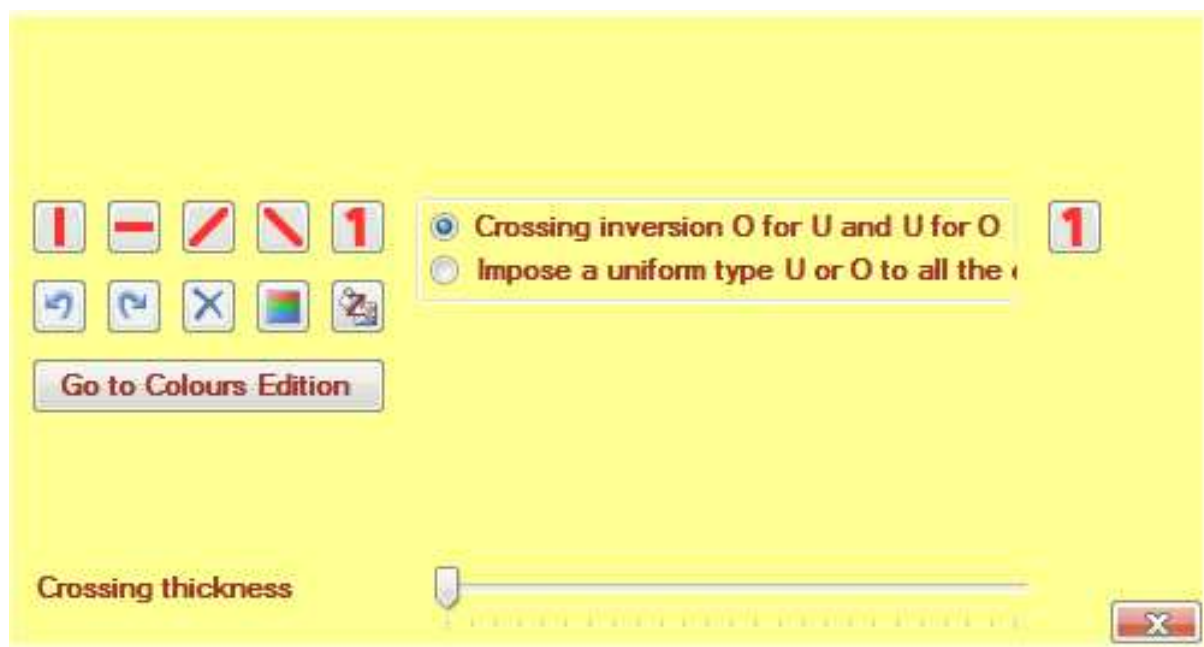
EDIT CROSSING MODE

EDIT TYPE of crossing (OVER – UNDER)

in the illustrations the editing of colours was done first.

It is always best to apply EDITION of **TYPE BEFORE** making EDITION of **COLOURS**.

Fig A CROSSING EDITION TOOL BOX



Two sorts of change can be applied (selecting one radio button) in the tool box.

INVERSION OF THE CROSSING TYPE (U becomes O and O becomes U)

UNIFORM TYPE: ALL crossings become **OVER** or **UNDER** depending on your clicking on one of the crossing of the structure chosen for having the change acted on it : **column, row, HP slash, HP anti-slash, single crossing**.

Fig B THIS IS COMMON TO COLOURS EDITION AND CROSSING EDITION



1 VERTICAL LINE : **COLUMN**

2 HORIZONTAL LINE : **ROW**

3 OBLIQUE LINE SLASH '/' : **HALF-PERIOD**

4 OBLIQUE LINE ANTI-SLASH '\' : **HALF-PERIOD**

5 "UNIT" or **SINGLE crossing**

6 **UNDO**

7 **REDO**

8 **Reset** (all changes are lost)

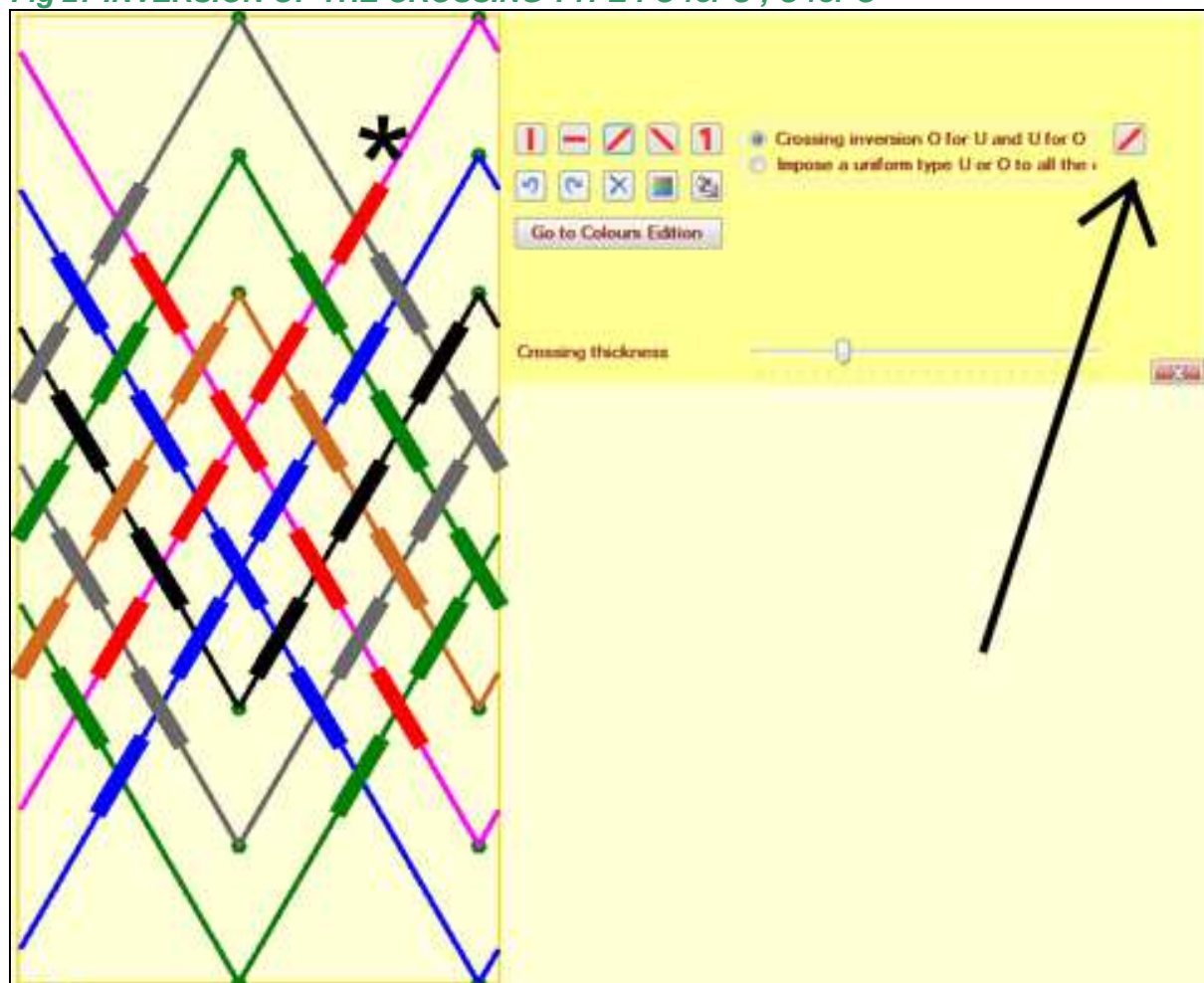
Reset matrix to U1-O1

Colours all crossings in blue

9 Final **colouring of the crossing with the colour of the strand** making the OVER

10 All crossing are coloured in blue

Fig 27 INVERSION OF THE CROSSING TYPE : O for U ; U for O



In the CROSSING EDITION TOOL BOX :

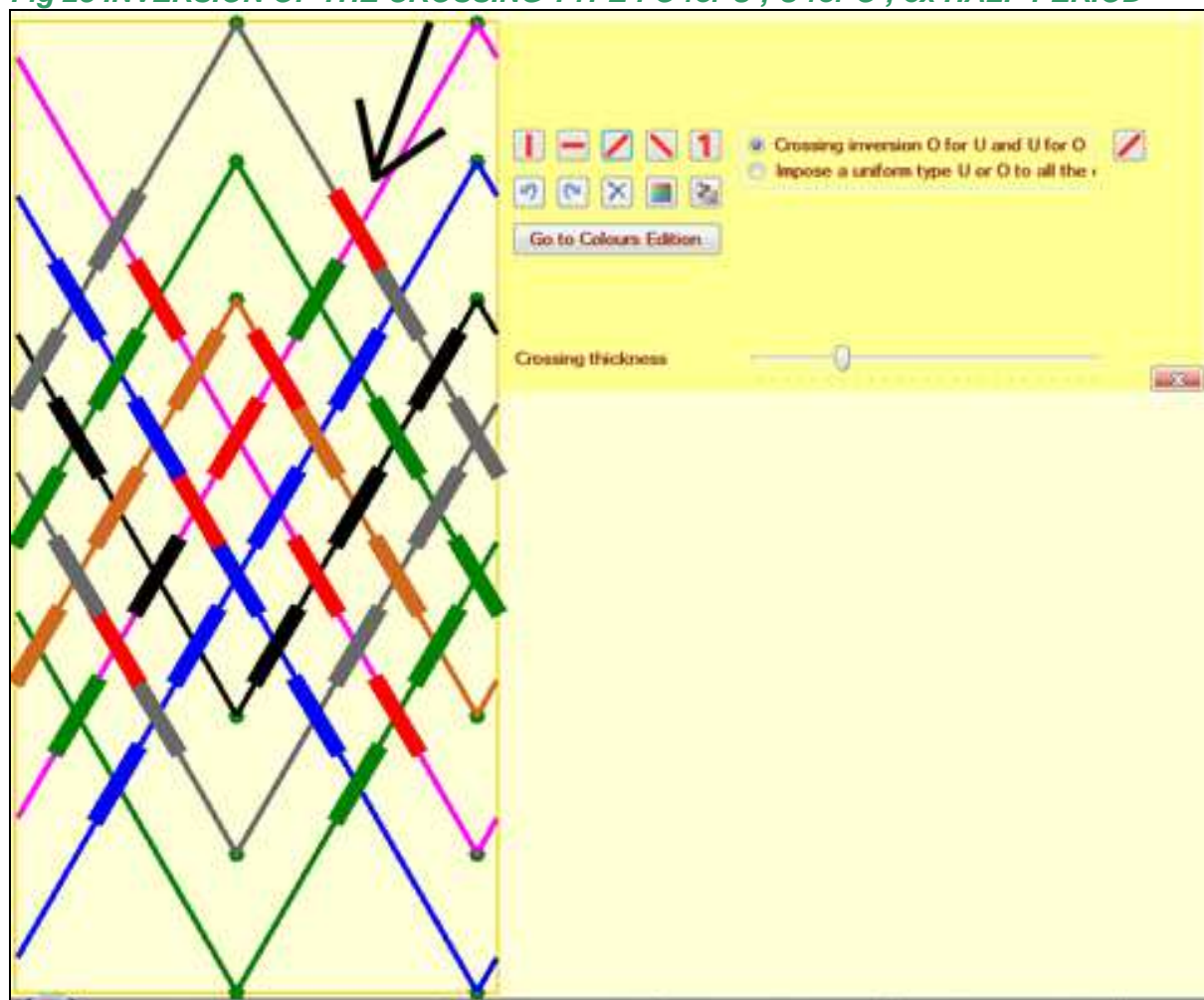
Select what you want as sort of change: here **INVERSION** of **TYPE** , **O** for **U** and **U** for **O** by selecting the proper radio button

Select the icon to set what “structure” will receive the change : here a HALF-PERIOD with a SLASH orientation ‘/’ (you click on one of the icons 1 to 5 in **Fig B.**)

The **HP** to be changed is the one, marked with *, the one with the red crossings

To apply the change click on one crossing on the **HP**.

Fig 28 INVERSION OF THE CROSSING TYPE : O for U ; U for O ; ex HALF-PERIOD

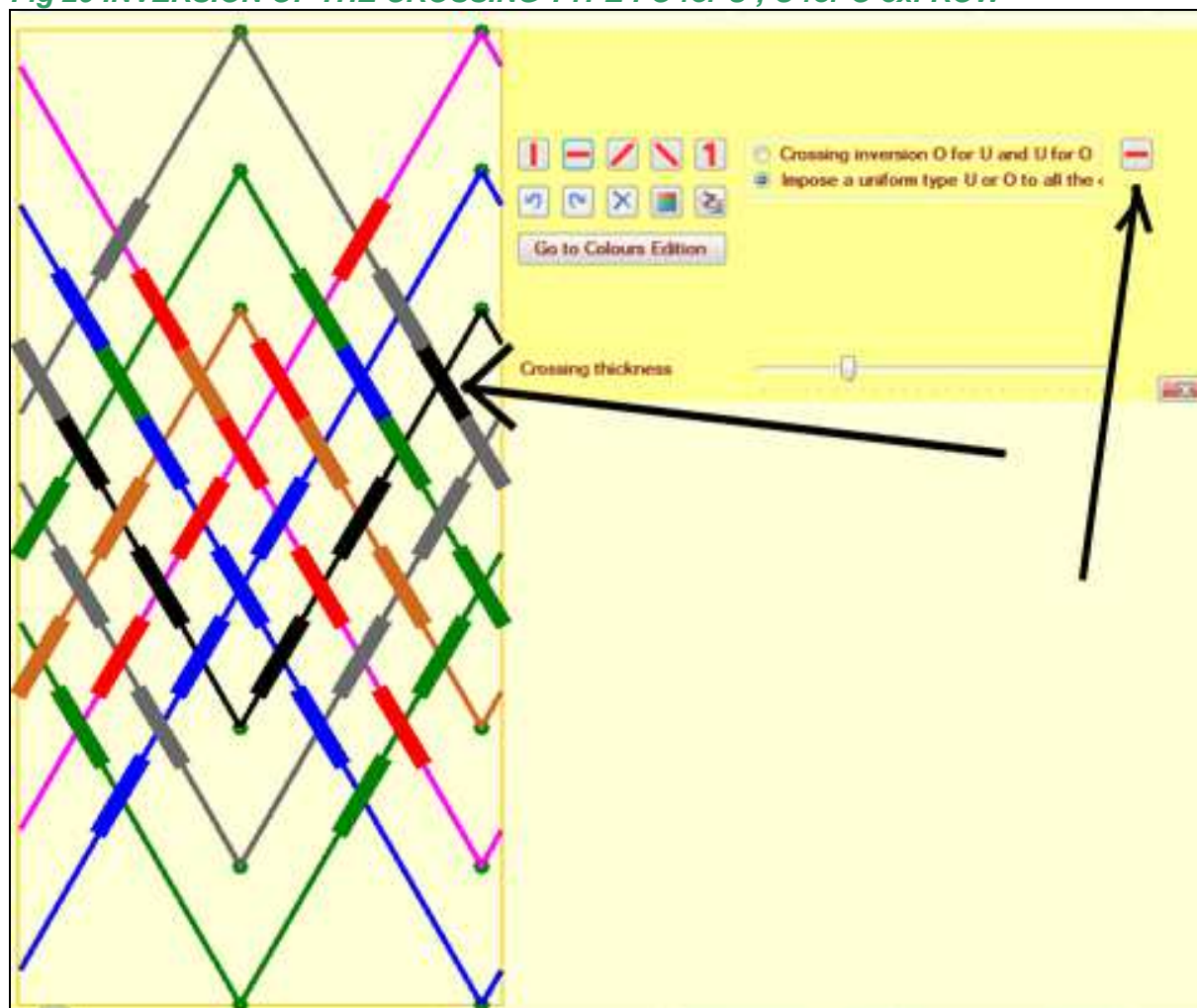


One crossing on the chosen **HP** has been clicked on and all the crossings on that **HP** were modified **O** for **U** and **U** for **O**.

To get all the crossings of the colour of the **STRAND** making the **OVER** use Icon N°9. (**automatic colouring** to the colour of the strand making the **OVER**)

It is best to apply any **CHANGE OF TYPE** of crossings **BEFORE** making **COLOURS EDITION**.

Fig 29 INVERSION OF THE CROSSING TYPE : O for U ; U for O ex: ROW



Here we selected **UNIFORM TYPE** : ALL **U** or ALL **O**

Then we selected **ROW**.

And then we clicked on one of the crossing of the third (from the TOP) ROW.

Crossings were changed to uniform **O** or uniform **U** : just click again if you do not obtain the desired orientation with the first click.

If you want to **EDIT COLOURS** just activate the button : **Go to Colours Edition**

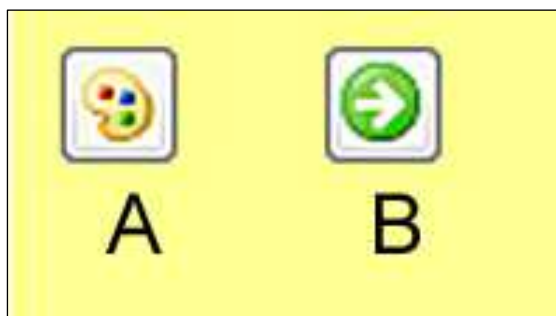
If you are done with editing the crossings then click on the **X** in the **BOTTOM RIGHT** corner of the tool box.

EDIT COLOURS OF CROSSINGS.

Fig B the TOOL BOX



Fig B-bis-close-up



Icon A : Colours all crossing in the colour that happen to be in the **right**most square case on the third (from the top) row of icons in **Fig B** above . **NO CHANGE** in the **U** or **O** TYPE is made.

Icon B : To replace one colour with another colour:

- select the colour to be **replaced**
- **LEFT** mouse **click** on this button to make a second button appear
- select the **replacement** colour which will be the colour of the second button
- **LEFT** mouse **click** on the second button

Fig 30 Changing crossing colour : starting position

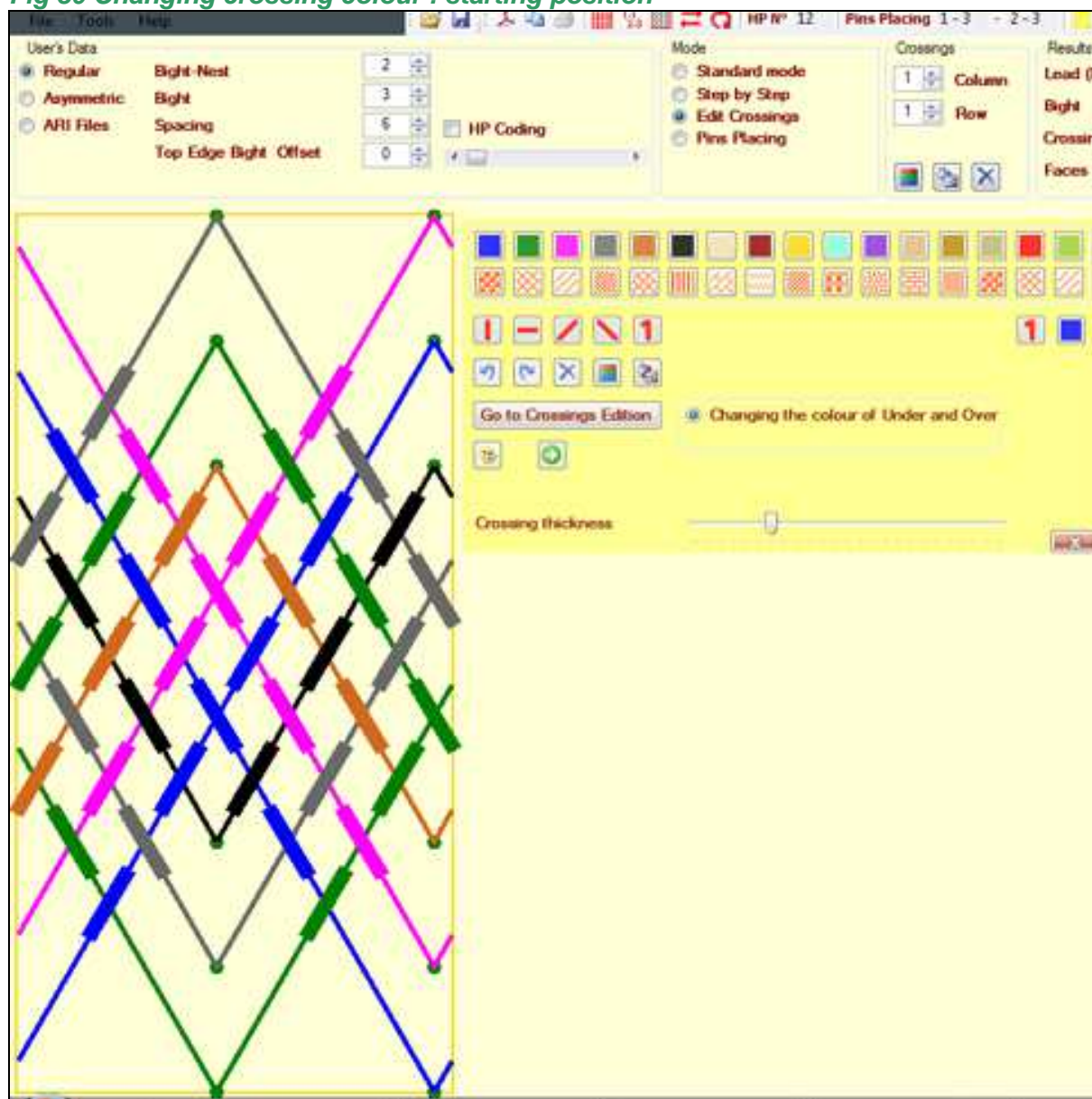
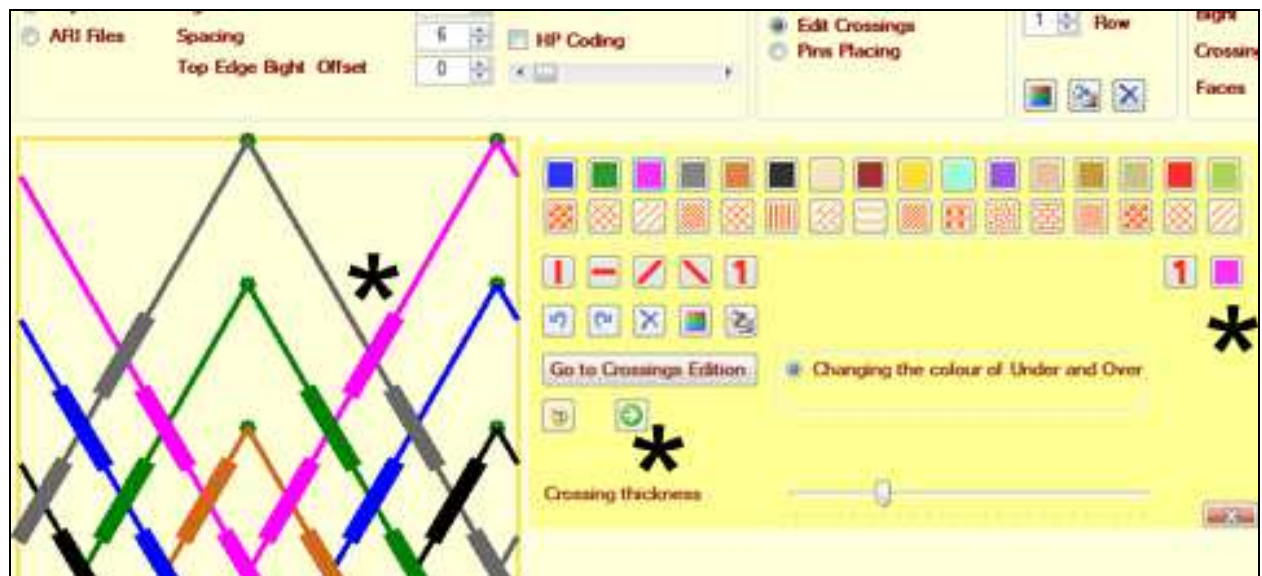


Fig 30: The colours edition tool box has just been opened and is in its “default” state.

We want to change the **PINK** crossings to **RED**.

Fig 31 first stage of the pink to red changing

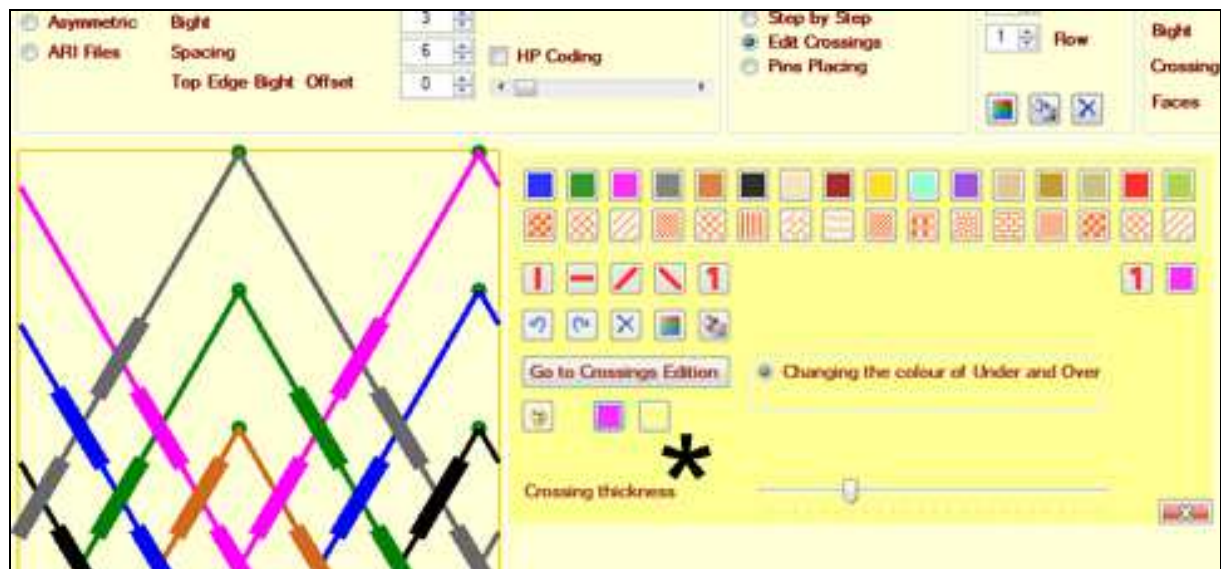


Points of interest are marked with *.

First in the upper row of coloured square cells we click on the PINK one (colour we want to modify) which action puts this PINK colour in the RIGHTMOST cell in the third row (from the top). SINGLE crossing is automatically selected.

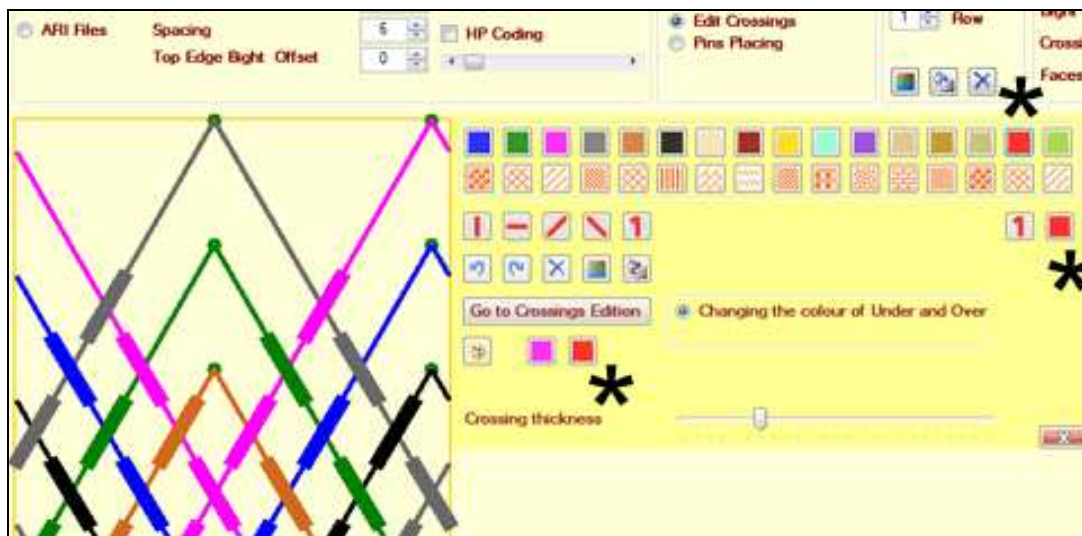
We now look at icon: **white arrow on green background**.

Fig 32 second stage we clicked on the proper icon B of Fig B-bis-close-up



As we clicked on the icon **white arrow on green background** we opened a new square button (pale yellow) the **Icon B** is now a PINK cell. We need to put the desired final colour (**RED**) in the second square button.

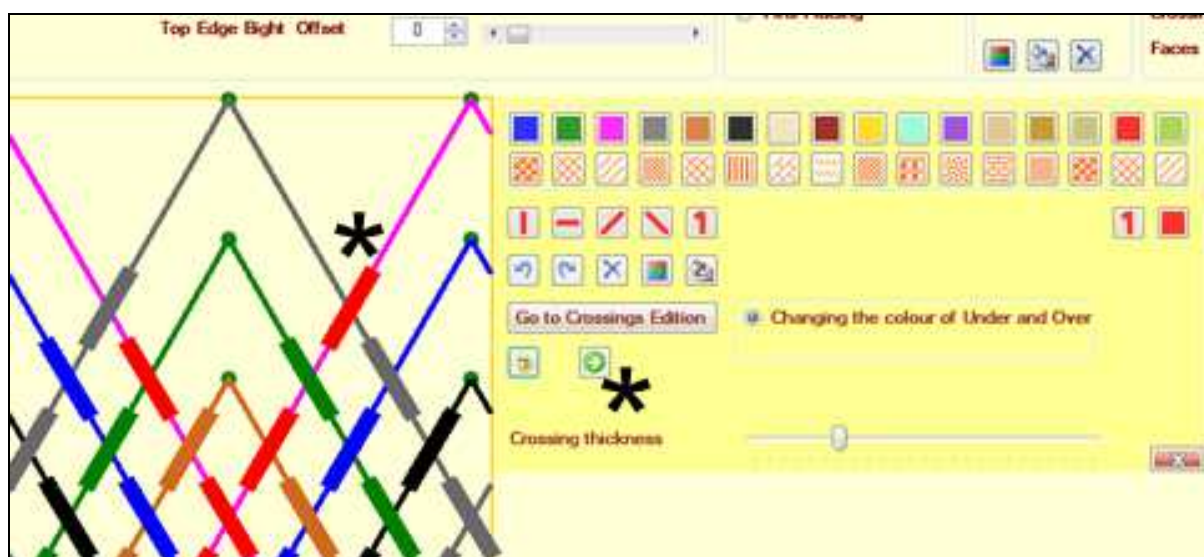
Fig 33 putting the desired colour (RED) in the second button



In the top row of coloured squares we just activated the **RED** one which put that colour in the second button which is now **RED**.

Side by side we have now a **PINK** square and a **RED** square.

Fig 34 changing the PINK crossings to RED crossings.




We clicked on the second button, the one which immediately rebuilt the icon B and coloured all the **PINK** crossings in **RED**.

If you want to EDIT COLOURS just activate the button: **Go to Crossings Edition**

If you are done with editing the crossing then click on the **X** in the **BOTTOM RIGHT** corner of the tool box.

EDITING BY SELECTED AREA

In **EDITION mode ONLY** it is possible to “**SELECT THE AREA**” where the modifications will be applied.

*** Choose the elementary structure to which the modification  will be applied: select the proper radio button in the tool box.

In Crossings **COLOURS EDITION**:-----

CTRL + LEFT MOUSE BUTTON + MOVING THE MOUSE "POINTER shows the selected area.

RELEASE of **LEFT** MOUSE BUTTON immediately colours ALL the crossings in the selected area with the selected colour.

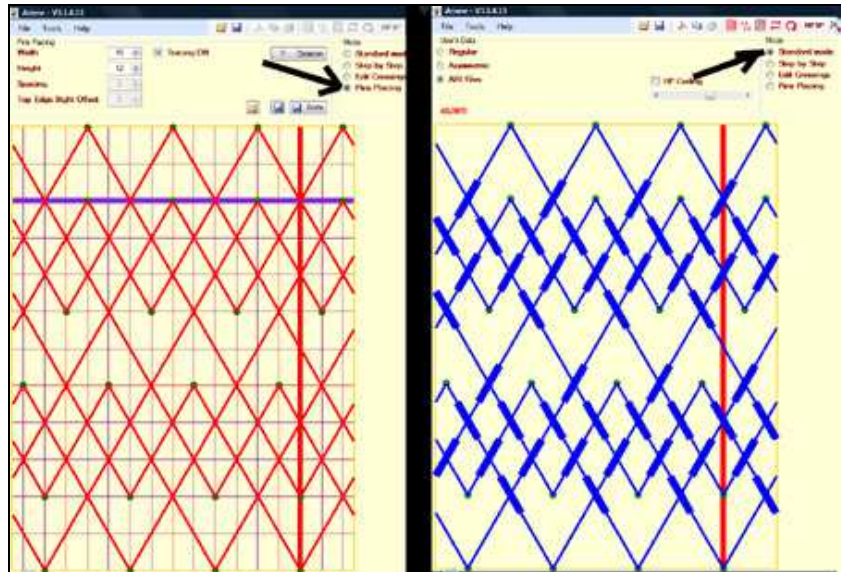
IN Crossings **TYPE EDITION**:-----

CTRL + LEFT MOUSE BUTTON + MOVING THE MOUSE "POINTER shows the selected area.

RELEASE of **LEFT** MOUSE BUTTON immediately applies the selected action to ALL the crossings in the selected area.

SOME VISUAL AIDS

They can reveal themselves useful for studying grids, for verifying OFFSET, or other things.
 VERTICAL **RED** LINE available in **both** STANDARD MODE and PINS PLACING MODE
 HORIZONTAL **VIOLET** LINE available **only** in PINS PLACING MODE.



In each case after **POSITIONING THE MOUSE POINTER** *at the proper place* it will be with **SHIFT (MAJ) + LEFT MOUSE CLICK** that you can obtain the line.

ONLY THE VERTICAL (for **BOTH MODES** : **STANDARD** and **PINS PLACING**)

POSITION OF USE POINTER == on the **lowest** RIGHT-RIM of the BOTTOM KNOT BORDER at the place you want the line.

Another key shortcut in another place will move the line at that place.

A simple click OUTside the grid area erase the line.

ONLY THE HORIZONTAL (ONLY for **PINS PLACING MODE**)

POSITION OF USE POINTER == on the **RIGHT** vertical side of the grid at the place you want the line.

Another key shortcut in another place will move the line at that place.

A simple click OUTside the grid area erase the line.

BOTH VERTICAL AND HORIZONTAL LINES (ONLY for PINS PLACING MODE)


POSITION OF USE POINTER == at the place where you want the intersection of the 2 lines.

Another key shortcut in another place will move the lines intersection at that place.

A simple click OUTside the grid area erase the lines.

KEY SHORTCUTS

(to open the tool tip put the mouse pointer on the spider in the upper right side corner)

Results						
Lead	<input type="text" value="3"/>	Over	<input type="text" value="23"/>	Error	<input type="text" value="0"/>	
Bight	<input type="text" value="17"/>	Under	<input type="text" value="11"/>	Width	<input type="text" value="34"/>	
Crossings	<input type="text" value="34"/>	Nb of Strand	<input type="text" value="1"/>	Height	<input type="text" value="3"/>	
Faces	<input type="text" value="34"/>	Nb of HP	<input type="text" value="34"/>			
<p>Standard mode</p> <ul style="list-style-type: none"> ° SHIFT + Click Draws and Moves a Vertical Line ° SHIFT + CTRL + ALT + Right Click Open Calculator ° Right Click Contextual Menu ° Wheel action Changes the Crossings Length ° CTRL + Molette En mode Colonne/Rang déplacement du démarrage <p>Step by Step Mode</p> <ul style="list-style-type: none"> ° SHIFT + Click Draws a Vertical line ° CTRL + Click Draw Successively Each Strand in Step by Step ° Right Click Contextual Menu ° Wheel action Changes the Crossings Length <p>Edit Crossings Mode</p> <ul style="list-style-type: none"> ° CTRL + Click and Mouse Move Trace a Zone to be modified ° Right Click Contextual Menu ° Wheel action Changes the Crossings Length <p>Pins Placing mode</p> <ul style="list-style-type: none"> ° SHIFT + Click Draws and Moves Vertical and Horizontal lines ° CTRL + Click After Placing a First Pin, Automatic Installation of Following Pins ° ALT + Click Double Grid Dimensions ° Right Click Contextual Menu 						