**SERIES SHOW**

CE

i.Top USER MANUAL

1) Управление по USB2.0 и USB 1.1 для монохромных и полноцветных лазерных проекторов.

2) Совместимость с Windows 2000/Windows XP/Windows 2003

3) Возможность подключения множества лазеров IN-STEP/OUT-OF-STEP (Если число лазеров превышает компьютерное число портов USB тогда, требуется USB Hub)

4) Возможность импорта из CorelDraw и PLT files.
5) Функция прямого ввода текста, включает: горизонтальный и вертикальный srolling текста.
6) Создание и конвертирование полноцветных картин в файл ILDA
7) Программа Редактирования и Воспроизведения.
8) Создание и Редактирование лазерного шоу с возможностью вставки в ваши рисунки файлов ILDA. Также имеется возможность многодорожечного, одновременного воспроизведения.
9) Функция Автоматического или ручного изменения RGB цвета воспроизводимого шоу.

Системные требования:
1) Частота центрального процессора - 2.4GHz или выше
2) Порт USB должен поддерживать USB1.1/2.0
3) Память 256М или больше
4) Память видео карты - 32 МБ или больше
5) Доступное место на жестком диске 1GB и более.
6) Экран должен поддержать разрешение 1024*768.

Установка программы:

1) Соединить плату USB с компьютером.
2) Система будет автоматически искать инсталяционный CD-ROM и указывать, когда новые аппаратные средства найдены.
3) Выбрать файл iTopEn\drivers\yjlight.inf

*Version 1.0*
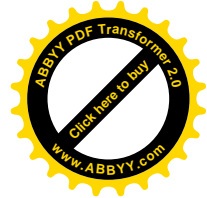
Control software description brief:

1   Operation with**USB2.0**   and **USB 1.1** graphics interface card allows blanking and full-color laser control functions

2   Compatible with**Windows 2000/Windows XP/Windows 2003**   operating systems

3   When using multiple lasers IN-STEP/OUT-OF-STEP function (If number of lasers exceeds computer number of USB ports then a USB hub is required)

4   Capable of importing CorelDraw **.PLT**files.

5   Direct text input function, includes: horizontal and vertical text sroll

6   Blanking and full-color pattern creator and   **ILDA** file editing function

7   **SECTION**   editing and play function

8   **SEQUENCE**   editing and play function, capable of inserting into**Drawing** /**Section** / **ILDA** files. Also capable of multi-track simultaneous play.

9   Automatic RGB color-change function Capable of**ILDA**   to **Section Section** to **ILDA Drawing list** to **ILDA Drawing list** to

10   ,,,**Section**   file transformation

System requirements:

1   CPU's clock frequency is 2.4GHz or above

2   USB port must support USB1.1/2.0 agreement

3   Memory of 256M or above

4   Display card memory is 32MB or above

5   HD available space is 1GB or above Screen display and display card must support 1024*768 resolution

Interface card drive program installation:

1   Connect USB graphics interface card to computer.

2   System will automatically search installation CD-ROM and indicate when new hardware is found.

3   Select file **iTopEn\drivers\yjlight.inf**
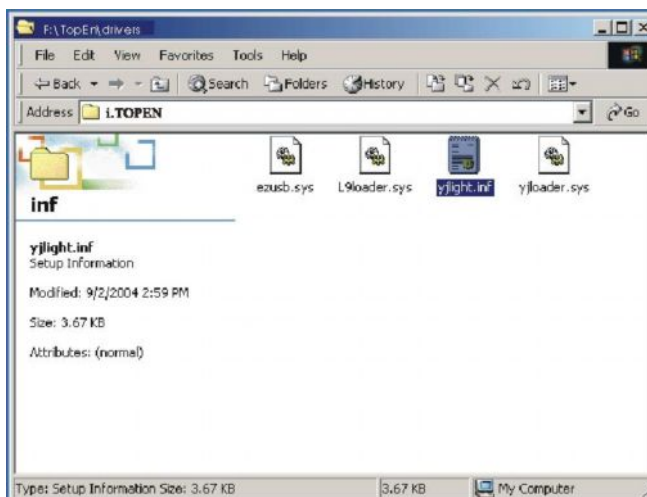
Application installation:

1   Copy the file **iTopEn** to the Hard-Drive

2   Run **iTOP.exe**

3   When using audio software, we advise **Windows Media Player 9.0**

.1.

Software Operation After starting **iTOP.exe**   the main window will appear. **Main window options:**

Main windows options buttons are used to select and open option windows.

1   **DRAW** : create and edit basic patterns and ILDA files

2   **PLAY** : manually display and roll basic patterns and ILDA files.

3   **SECTION** : design animated sequences using section editing with patterns
4   **SEQUENCE** : edit and display animated sequences
5   **FILE** : handling of basic pattern, section and ILDA files
6   **SELECT DEV** : select lights to be controlled
7   **DETECT DEV** : add newly devices to device list

I) Multiple light OUT-OF-STEP control :

1   Connect the USB hub connecting cable to the main computer USB port.
2   Connect each lights interface card connecting cable to the corresponding port
3   Turn on power to lights
4   Start up application

4. Select**Usb-0** from**SELECT DEV** menu
1   Start up another application
2   Select**Usb-1** from**SELECT DEV** menu Starting up an application for each laser light
(selecting a different device each time) will allow independent control of each light. If PC has many USB
ports then a USB hub will not be required.
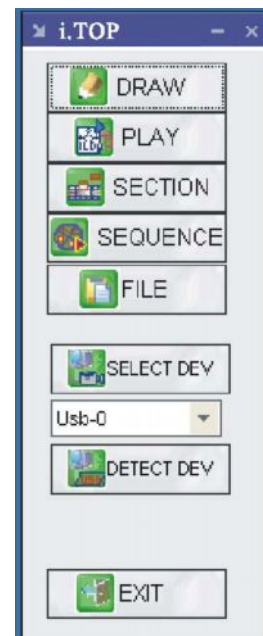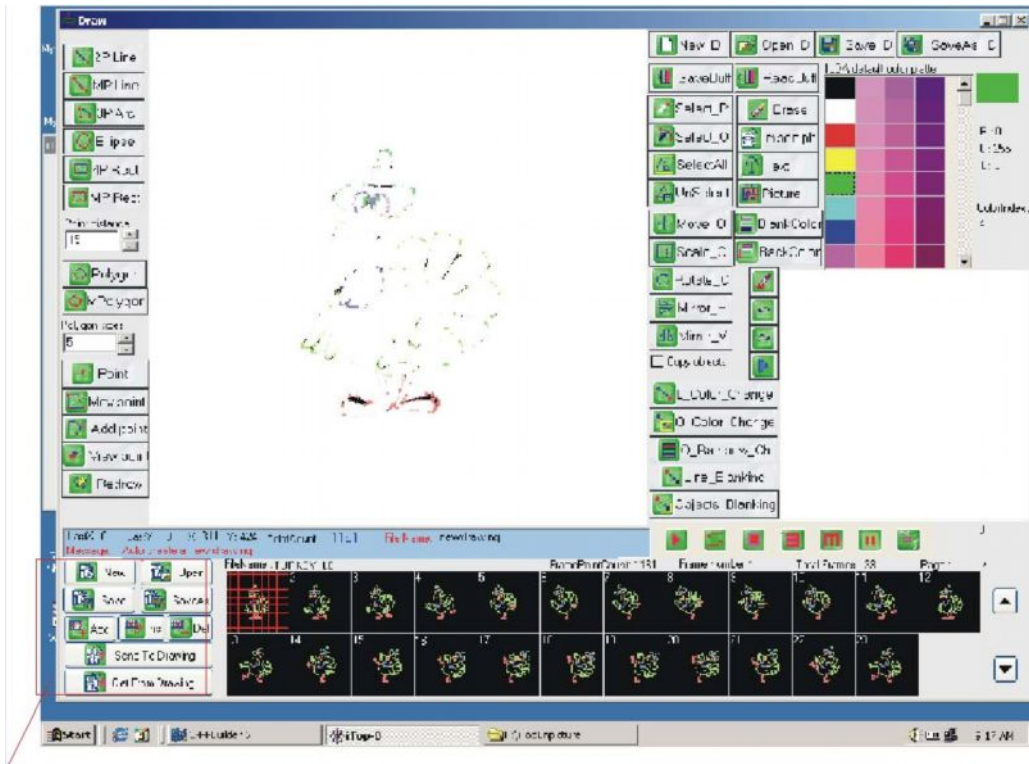
DRAW Operation instructions:

1   **2P Line:**   (two-point line) select a starting point by clicking *left mouse-button* , choose next point in line with *left mouse button* , finish by clicking *right mouse button* .

2   **MP Line:** (multi-point line) create line in the same way as for a two-point line, additional points will be created with separation distance of that set in**2P Distance.**

3   **3P Arc:**   (three-point arc) select center point of arc by clicking *left mouse button* , then select start and finish points with *left mouse button*, additional points will be created at set distance along line, *right mouse button*   to abandon.

4   **Ellipse:**   click*left mouse button*   to set start x-axis/y-axis limit, click again to set finish x-axis/y-axis limit, center of ellipse will be center of x-axis range & y-axis range, hold down*Ctrl key*   for circle,*right mouse button*   to abandon.

5   **4P Rect:**   (four-point rectangle) click *left mouse button*to set start x-axis/y-axis limit, click again to set finish x-axis/y-axis limit, *right mouse button*   to abandon.

6   **MP Rect:** (multi-point rectangle) click*left mouse button* to set start x-axis/y-axis limit, click again to set finish x-axis/y-axis limit, additional points will be created with separation distance of that set in **Point Distance** ,   *right mouse button* to abandon.

7   **Point Distance:** (two-point distance) set the separation distance between points

8   **Polygon:**   create a polygon by clicking *left mouse button* to position center, click *left mouse button* again to finish,*right mouse button*   to abandon.

9   **mPolygon:** (multi-point polygon) create polygon in the same way as above, additional points will be created with separation distance of that set in **Point Distance.**

10   **Polygon sides:** set the number of polygon sides

11   **Point:**   create points using left mouse button, right mouse button to abandon, each set of points can be selected by using **Select_O** .

12   **Mov point:** (move point) select point using *left mouse button* , place in new location by clicking *left mouse button right mouse button* , to abandon.

13   **Add point:**   click left mouse button to add point to line

14   **View point:** determine view or not view points

15   **Redraw:** refresh Drawing canvas

16   **New_D:**   (new drawing) clear Drawing canvas and create a new pattern, default file name is **newdrawing** .

17   **Open_D:**   open a drawing, file extension**.ddr**

18   **Save_D:**   save a drawing, it is advised to save into the Drawing folder to allow splay in SECTION and PLAY.

19   **SaveAs_D:**   save the file under a new file name.

20   **SaveBuff:** save drawing to temporary buffer memory.

21   **ReadBuff:**   read drawing last saved to buffer memory.

22   **Select_P:**   (select point) use the left mouse button to select a point, point will show red after being chosen, click space area to drag and select other points.

23   **Select_O:**   (select object) use the left mouse button to select a point on an object, all points on that object will show red after being chosen, click space area to drag and select other points.

24   **SelectAll:** select all points in drawing.

25   **UnSelect:** unselect all points in drawing.

26   **Move_O:**   (move object) move selected point/s or object to a new location by clicking and dragging left mouse button, to place in new location click left mouse button again, right mouse button to abandon. If **copy objects** is selected, object copy will move to new location and original will not change.

27   **Scale_O:** (scale object) select a point as point of scale origin and click l *eft mouse key* , movement right and down will enlarge the image in the x, y direction respectively, movement left and up will invert the image and enlarge the inverted image, hold down

   Ctrl key to maintain x/y proportian, *right mouse button*   to abandon. If **copy objects** is selected, object copy will perform scale changes and original will not change.

1   **Rotate_O:** (rotate object) rotate selected object about center of drawing window. If **copy objects** is selected, object copy will move to new location and original will not change.

2   **Mirror_H:** (mirror horizontal) selected object is inverted about the x-axis. If **copy objects**   is selected, object copy will invert to new location and original will not change.

3   **Mirror_V:** (mirror vertical) selected object is inverted about the y-axis. If **copy objects**   is selected, object copy will invert to new location and original will not change.

4   **copy objects:** will create object copy when used with tools 26-30.

5   **Select color:** select a color from the color pallete

6   **Change_color_L:** (change color of single line) after selecting new color, click *left mouse button* on line

7   **Change_color_O:**   (change color of object) after selecting new color, will change all selected objects color. **O_Rainbow_Ch** :change color of object to rainbow(Colr 1-7);

8   **Change_blank_L:** (change blank line) select line to blank out

9   **Change_blank_O:** (change blank object) select object to blank out.   Please note that it is only the lines between points that can be blanked out, if you wish to blank out the points, you must change their color to black.

10   **Erase:** erase selected line or object

11   **Import PLT:** used to import **.plt**   files from **CorelDraw 38.1Find:** used to locate required .**plt** files. **38.2Fine/Coarse:**   used to define the precision and amount of points (the larger the
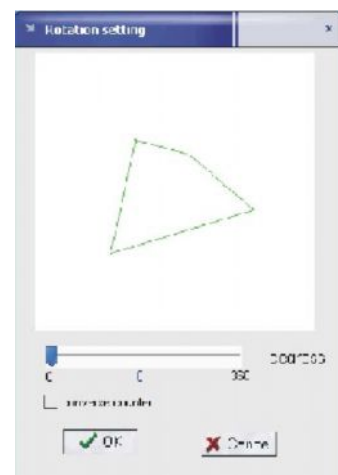
number the coarser the pattern) **38.3Size:** used to define the size of the pattern
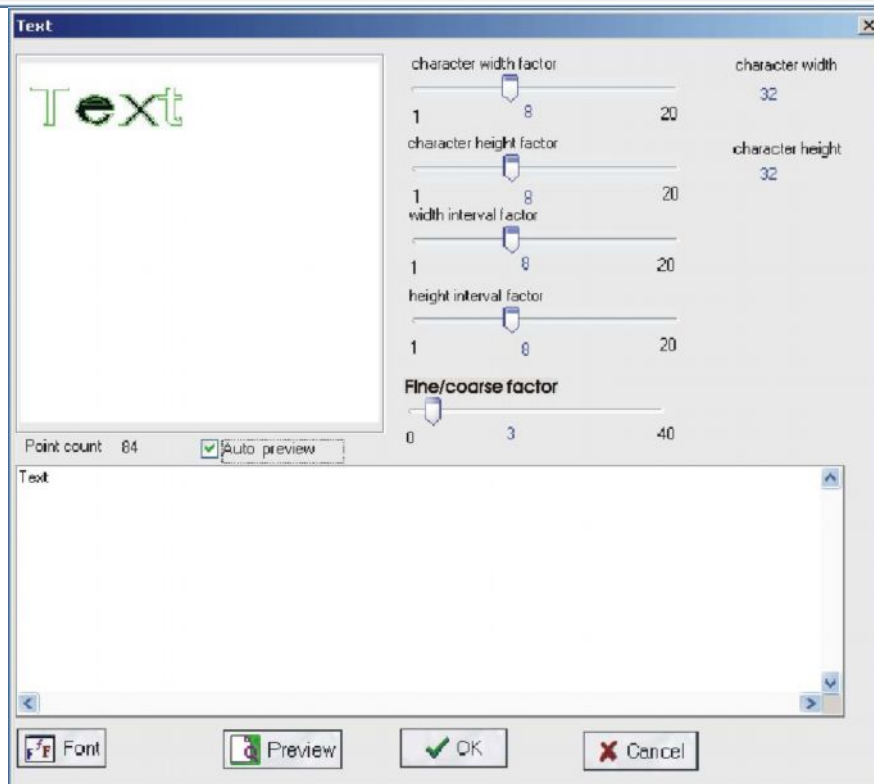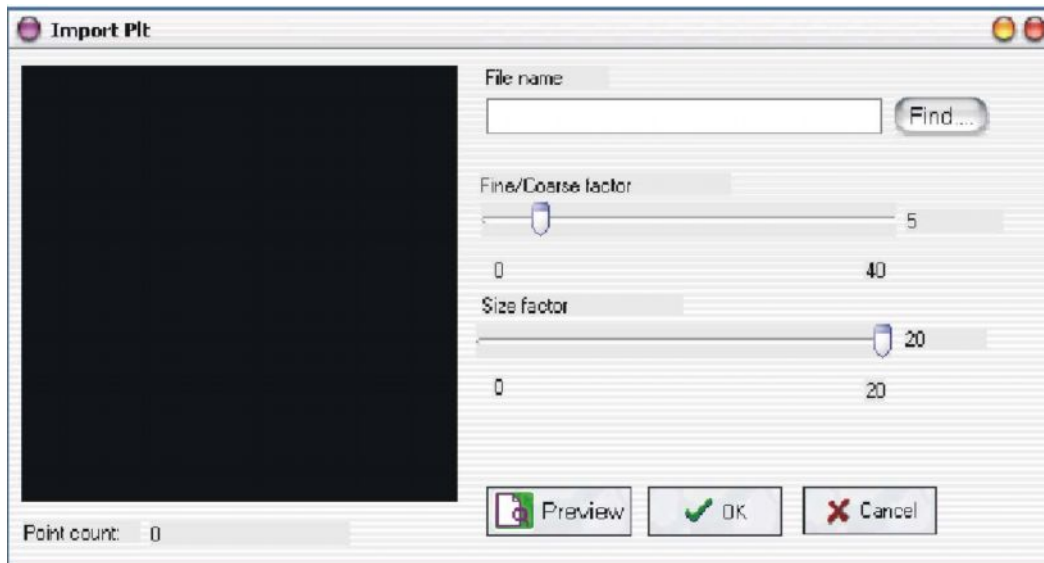
39.Text: used to import **TrueType** text as a pattern **39.1Character width factor:** used to define character width (1 is largest) **39.2Character height factor:** used to define character height (1 is largest) **39.3Width interval factor:** used to define interval between characters (1 is largest) **39.4Height interval factor:** used to define interval between lines (1 is largest) **39.5Fine/coarse:** used to define the precision and amount of points (the larger the

number the coarser the pattern) **39.6Auto preview:** allows auto-preview of all changes made with tools 39.1-39.5**39.7Font:** brings up character font list

40.Picture: used to import a.**Bmp** picture file

1   **BlankColor:** (blanking color) change color of existing blanking lines to selected color in color palette.

2   **BackColor:** (background color) change color of background to selected color in color palette.

3   **Dropper:** select a point to become the color in the color palette.

4   **Undo:** return to previous step (can retrace 400 steps)

5   **Redo:** advance one step

6   **Display:** display pattern from drawing window

7   **Display ILDA-image:**   display**.ild**   file
8   **Repeat:**   repeat display indicator
9   **Stop:** stop all display
10   **Horizontal direction:**   display pattern in horizontal direction
11   **Vertical direction:**   display pattern in a vertical direction
12   **Pause:**   pause display
13   **Settings:**   please see the below settings menu (all settings will be stored in file and will be effective next time file is opened.
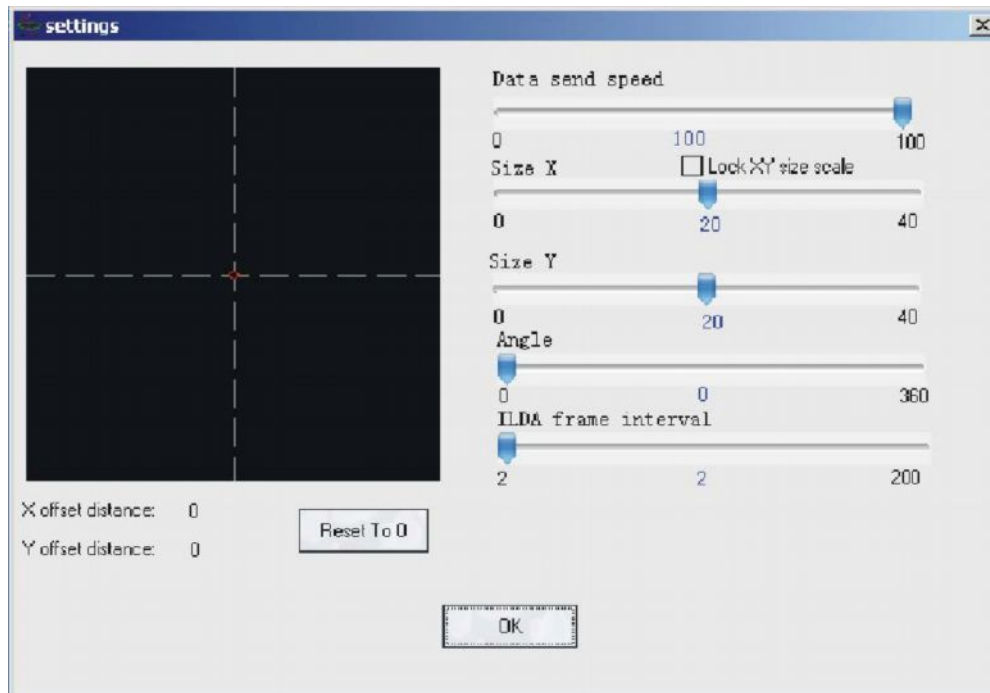

53.1 **Display position:** dragging the small red circle controls position of display

52.2 **Data send speed:** used to define USB interface card's operating speed.Altering this will affect the ScanRate.

Common values when.. displaying ILDA image = 100 displaying basic pattern = 85 diplaying text = 99 Dot drawing≤   51

2   **Horizontal size:** used to determine horizontal size ratio when displaying pattern 53.4**Vertical size:** used to determine vertical size ratio when displaying pattern

53.5   **Angle:** used to determine the angle when displaying pattern

53.6**ILDA frame interval:**   used to determine the interval between frames when displaying ILDA files.

54. ILDA operation window : used to perform operations on**.ild**   files 54.1New: create a new **.ild** file, default file name is **NewImage.ild 54.2Open:** open a **.ild** file **54.3Save:** save a**.ild**   file **54.4SaveAs:** save the **.ild** file under a new filename**54.5Add:**   add a new blank frame **54.6Insert:** into the previous frame insert a blank frame**54.7Delete:**   delete the current frame**54.8Send To Drawing:**   send the current frame to**Draw**   canvas to enable editing

54.9 Get From Drawing: copy the pattern from **Draw** canvas and import into current frame,

.6.

II) PLAY   Operation instructions

1.**Color strip:**   used to change output color when displaying
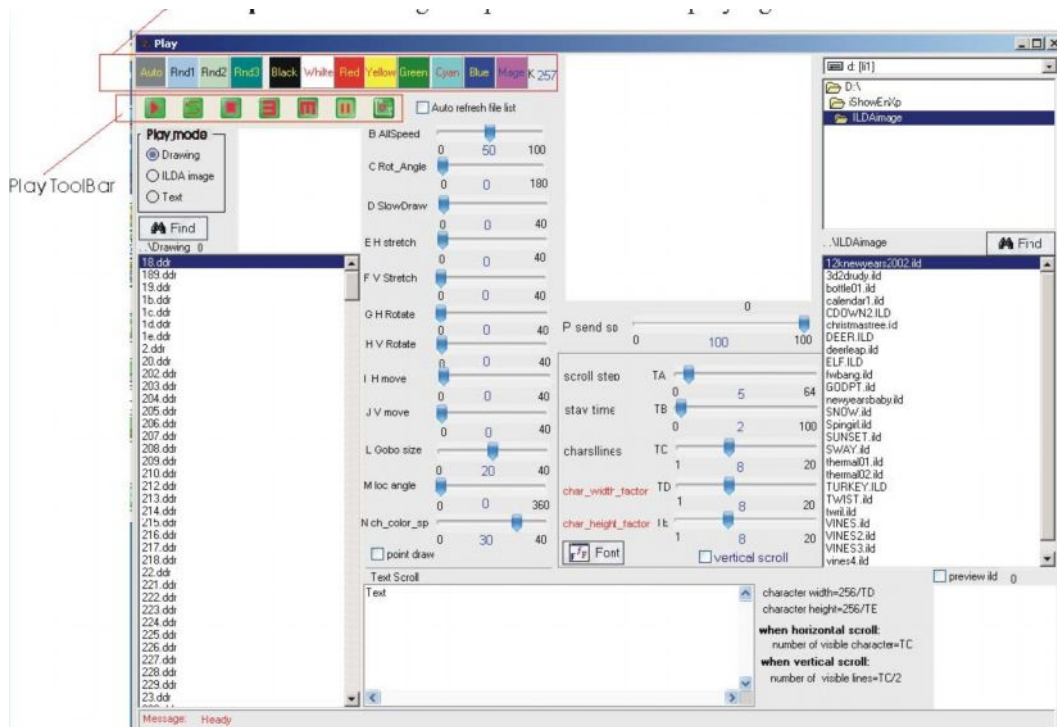
1.1 Auto: keep original colors of pattern, color code = 257

1.2 Rnd1: automatic full-color change, color code = 258 (note: effect observed when using a pattern with different colors)

1.3 Rnd2: automatic single-color change, color code = 259

1.4 Rnd3: color change flow, color codes 1 to 7 are equally distributed and change causing a flow effect, color code = 260

1.5 Black: change pattern color to black, color code = 0

1.6 White: change pattern color to white, color code = 1

1.7 Red: change pattern color to red, color code = 2

1.8 Yellow: change pattern color to Yellow, color code = 3

1.9 Green: change pattern color to Green, color code = 4

1.10 Cyan: change pattern color to Cyan, color code = 5

1.11 Blue: change pattern color to blue, color code = 6

1.12 Magenta: change pattern color to magenta, color code = 7

1   **Play mode:** used to select pattern format for displaying (Drawing, ILDA image or Text)

2   **Auto refresh file list:** when window is active, Drawing and ILDA image file list will refresh

4.**Control panel:** used to control pattern action **B AllSpeed:** control speed of all actions C**Rot_angle:** control rotation angle of each step

.7.

D **SlowDraw:** control quantity of points to draw with each stepE **H stretch:** control speed of stretch about central y-axisF**V stretch:** control speed of stretch about central x-axisG**H rotate:** control speed of rotation about central y-axisH **V rotate:** control speed of rotation about central x-axisI**H bounce:** control speed of horizontal bounceJ **V bounce:** control speed of vertical bounceL**Gobo size:** control size of goboM**Set angle:** set angle of inclination from verticalN **Color speed:** control speed of color change when using Rnd1, Rnd2 or Rnd3O**Point Draw:** display main points only without joining linesP **Send sp:** (send speed) data send speed for all of the above controls

1   **Text scroll:** horizontal and vertical text scrolling **TA Scroll step:** determine the scroll step of each character **TB Stay time:** determine the time between steps **TC chars/line:** determines the number of characters per line (when horizontal scrolling), determines the number of lines per page (when vertical scrolling)**TD Char_width_factor:** (character width factor) determine the width of each character, 1 is largest (re-select **Display** to view).**TE Char_height_factor:** (Character height factor) determine the height of each character, 1 is largest (re-select**Display** to view)**Font:** select font (re-select**Display** to

view)**Vertical Scroll:** characters scroll vertically according to the number of lines. Maximum characters per line -English = 20, Asian countries script = 10. Excess characters will be ignored (re-select **Display** to view)

2 **Preview ILDA:** preview **.ild** images (please note: preview may affect currently displayed images for about 15 to 60 seconds

3 **Drawing file list pop-up menu:** click right mouse button in**Drawing file list Edit:** send currently selected file to **Draw** to enable editing**Refresh:** Refresh**Drawing file list**

4 **ILDA image file list pop-up menu:** click right mouse button in **ILDA image file list Edit:** send currently selected**.ild** file to **Draw** to enable editing**Refresh:** Refresh **ILDA Image file list**
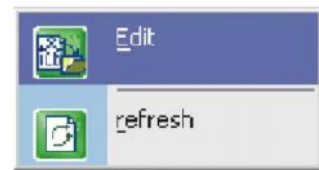
III) SECTION Operation instructions

SECTION is a simple animation operation using multiple patterns compiled together
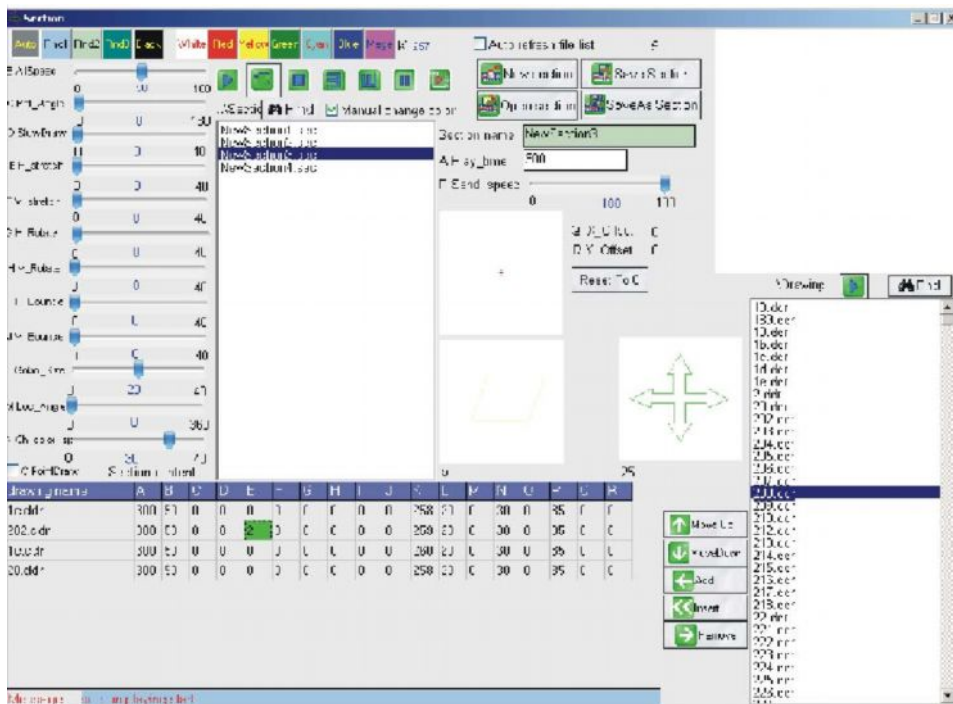
1 **Color strip:** as described in PLAY 1

2 **Display control:** as described in DRAW 46-53

3 **A Play_Time:** determine the time that each frame of the section is displayed **B-P:** as described in PLAY 4.

4 **Add:** add a frame into the section, drawing name is same as selected file in**Drawing file list** (values for A-P will also be stored independently for each frame that is added to the section)

5 **Insert:** insert a frame into the section, drawing name is same as selected file in**Drawing file list** (values for A-P will also be stored independently for each frame that is added to the section)

6 **Remove:** remove selected frame from the section

7   **Move Up:** move selected frame up
8   **MoveDown:**   move selected frame down

IV) SEQUENCE Operation instructions
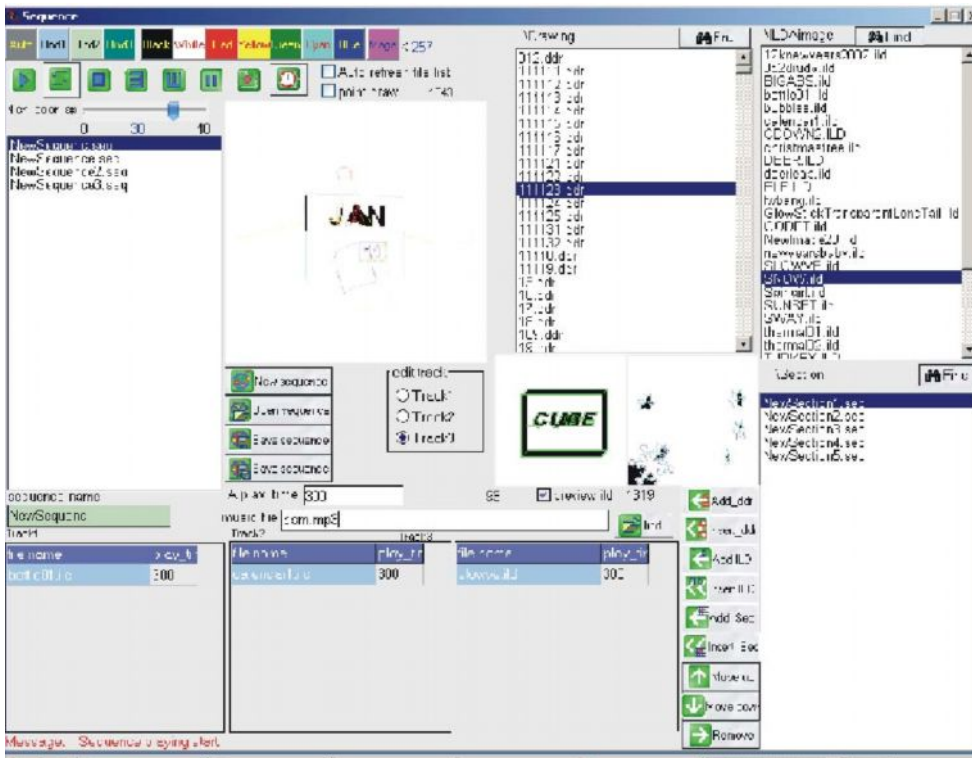
SEQUENCE is an operation using multiple Drawings or **.ild** files to create a complex animation. There are 3 tracks, with each track capable of inserting multiple Sections, Drawings or **.ild** files. When displaying all three tracks are simultaneously playing. Audio files can be added into SEQUENCE and will simultaneously start and finish with the displayed sequence.

1   **Color strip:** as described in PLAY 1
2   **Display control:** as described in DRAW 46-53
3   **Color change speed / Point:** as described in PLAY 4N / DRAW 11 respectively
4   **Edit track:**   select track to be edited
5   **A Play_Time:**   determine the time that each frame of the track is played
6   **Add_ddr:**   add selected Drawing file from **Drawing file list** to current track
7   **Insert_ddr:**   insert selected drawing from **Drawing file list**   to current track
8   **Add .ild:** add selected **.ild**   file from **.ild file list** to current track
9   **Insert ild:** insert selected **.ild** file from   **.ild file list** to current track
10   **Add_Sec:** add selected **Section**   file from **Section file list**   to current track
11   **Insert_Sec:** insert selected **Section file**   from **Section file list** to current track
12   **Move Up:**   move selected frame up in current track
13   **Move Down:**   move selected frame down in current
14   **Remove:** remove selected frame from current track
15   **Setting timer:** please refer to picture below

15.1 first select the time by dragging the marker along the time scale, then click on the On/Off Timer button to set time. If the time is already set, clicking on On/Off timer will reset time.

V) FILE Operation Instructions
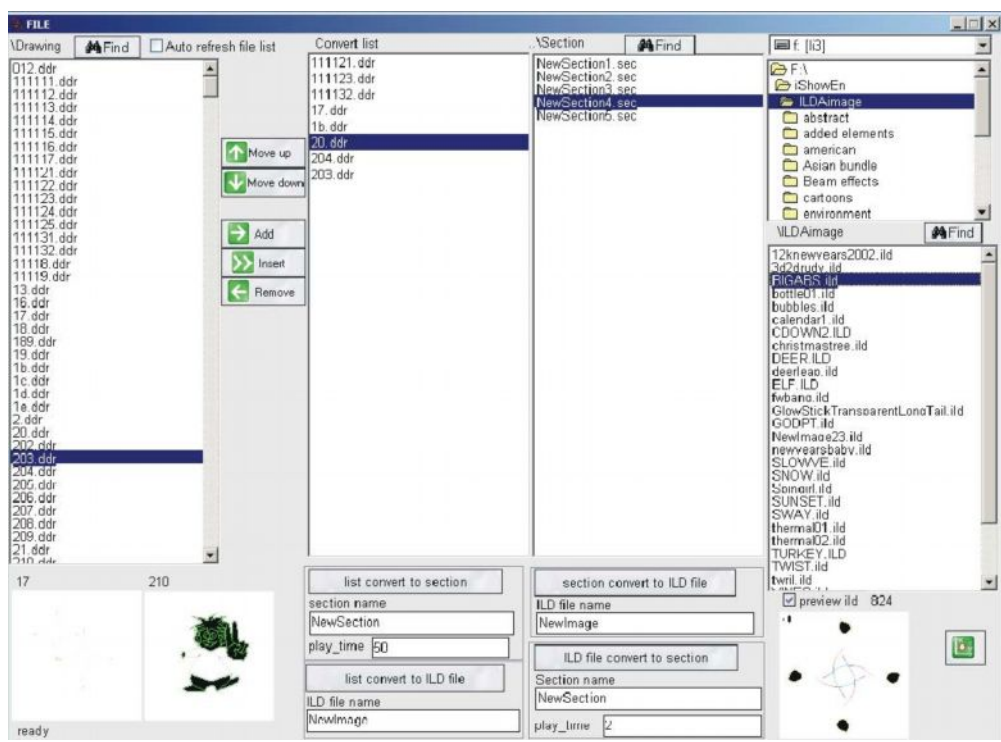
1	**Add:** add selected file from **Drawing file list** to **Convert file list**
2	**Insert:** insert selected**Drawing** file from**Drawing file list** to **Convert file list**
3	**Remove:** remove selected**Drawing** file from**Drawing file list**
4	**Move Up:** move selected**Drawing** file up
5	**Move Down:** move selected**Drawing** file down
6	**List convert to section:** convert**Convert file list** contents to **Section**
7	**List convert to .ild file:** convert**Convert file list** contents to **.ild** file
8	**Section convert to .ild file:** convert selected **Section** file to **.ild** file
9	**.ild file convert to section:** convert **.ild** file to**Section** file

PAN and TILT Movement control

Please click**STAR, PROGRAM, MotorHead** and then following interface will appear:
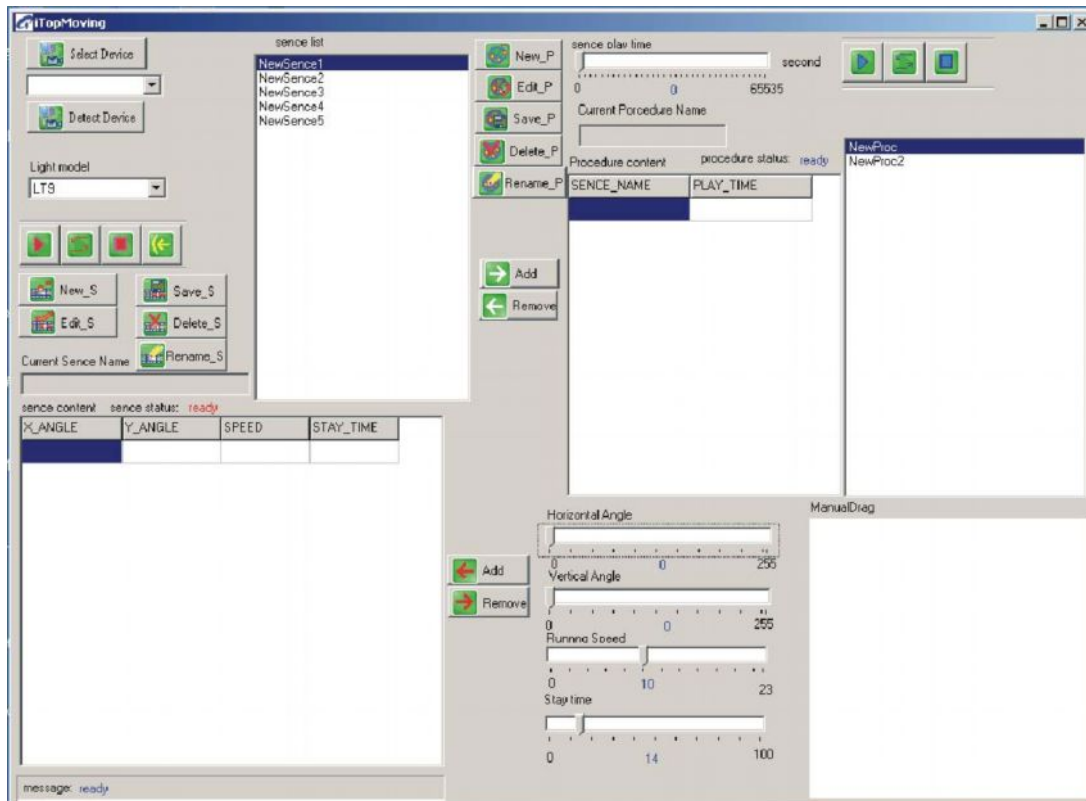
1.Running Speed: define the rotation speed (value=0-19)

2.Horizontal Angel: define the rotation angel of the horizontal motor (value=0~450 °)

3.Vertical Angel: define the rotation angel of the vertical motor (value=0~270 °)

4.Stay Time: after finish each step need to stay time, per value 10 mans 1 second (value=0~100)

5.Add (red color): add the above four value into scene

6.Remove (red color): dele current row

7.Scene list: list all scenes

8.DEVICE: can choose the equipment of which the process needs

9.New_s: set up a new scene, and other playing scene will stop play

10.Edit_s: open the scene in the scene list, and other playing scene will top play

11.Save scene: save the current scene into scene category files

12.Dele scene: dele the scene of which in the scene list

13.Re-name scene: rename the scene in the scene list if needed

14.Scene playing: open the scene in the scene list and play it, during playing can not edit

15.Repeat marks (red color): press this button will repeat the play

16.Stop (red color): scene stop play

17.Reset: Horizontal and vertical motor reset.

18.Process list: list all processes

19.New process: set up a new process, and other playing process will stop play

20.Edit scene: open the process in the process list, and other playing process will stop play

21.Save process: safe the current process into PROC category files

22.Delete process: delete the process of which in the process list

23.Scene play time: set a time for the scene playing

24.Add (white color): add the scene and scene playing time into process contents.

25.Remove (red color): delete current row at the process contents

26.Playing process (blue color): play the chosen process

27.Repeat marks (blue color): press this button will repeat the play

28.Stop (blue color): process stop play