

Video software suite

Quick Guide

(Rev. 1.0)



Sede BOLOGNA: Via Caduti Di Sabbiuno 6/F – 40011 Anzola Emilia - Bologna - Italy Tel. +39 051 736555 - Fax. +39 051 736170

Sede BERGAMO: Via Italia 1 – 24030 Medolago (Bg) – Italy

e-mail: info@axeltechnology.com - web site: www.axeltechnology.com

SUMMARY

| 1. | INTRO | DUCTION TO XTV | 5 |
|------------------|---------|----------------------|----|
| 2. | INSTAI | LATION | 6 |
| 2 | 2.1. XT | V SUITE INSTALLATION | 10 |
| 3. | Y-TRIN | IMER | 14 |
| <i>3</i> . 4. | | OUT | |
| | | | |
| 4 | | ENU DESCRIPTION | |
| | 4.1.1. | LOAD PLAYLIST | |
| | 4.1.2. | LOGO | |
| | 4.1.3. | JINGLE MANAGEMENT | |
| | 4.1.4. | FILES FIELDS | |
| | 4.1.5. | CHANGE VIEW | |
| | 4.1.6. | HYSTORY | |
| | 4.1.7. | LOG FILE | |
| | 4.1.8. | DEVICES | |
| 4 | | STEM CONFIGURATION | |
| | 4.2.1. | SETUP WIZARD | |
| | 4.2.2. | AUDIO / VIDEO | |
| | 4.2.3. | GPIS | |
| | 4.2.4. | SWITCHERS | |
| | 4.2.5. | VCRS | |
| | 4.2.6. | LINES | |
| | 4.2.7. | CART MACHINES | |
| 4 | | AYLIST INFORMATION | |
| | 4.3.1. | CLIP BROWSER | |
| | 4.3.2. | CLIP PARAMETERS | |
| | 4.3.3. | CLIP PREVIEW | |
| | | AIR INFORMATION | |
| 5. | X-CAPT | TURE | 40 |
| | | JDIO CODEC SETTINGS | |
| | | DEO CODEC SETTINGS | |
| 4 | 5.3. RE | CORDING SCHEDULER | 44 |
| 6. | X-SCHE | DULER | 45 |

MINIMUM SYSTEM REQUIREMENTS

- Operating System: Windows XP PRO SP2
- Processore Pentium IV Dual Core 3,0 GHz
- 1 Gigabyte DDR Ram
- 80 Gigabyte HD for operating system, NTFS formatted
- Video card PCI-Express o AGP
- Video card DECKLINK BLACKMAGIC (advised)

1. INTRODUCTION TO XTV

XTrimmer

XTv is a software suite composed by 4 programs

| _ | XScheduler | → It's a scheduler used to create and modify aplaylist. It is windows style, so |
|---|-------------------------|---|
| | it implements all wind | ows basic function (like cut, copy, paste, drag & drop, and so). It is able to |
| | check immediately the | e clip and can export the playlist also in CSV file format or XML file format (so |
| | the playlist can be ope | ened with the most common software) |

→ It's an utility used for media files marking.

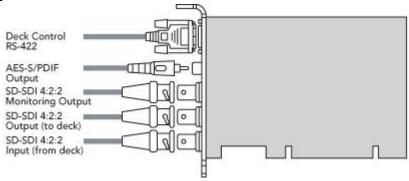
- XPlayout → It's the playout software. It can play any kind of audio/video files (you just must have the right codec). It is also able to manage transiction between clips, VCRs, switches, cart machine and any other kind of video input. An engine for logos (also for the single clip) is present in XPlayout
- **Xcapture** → It's a video digital recorder, which can codify in realtime and in every file format, the video flow captured by the Blackmagic card

2. Installation

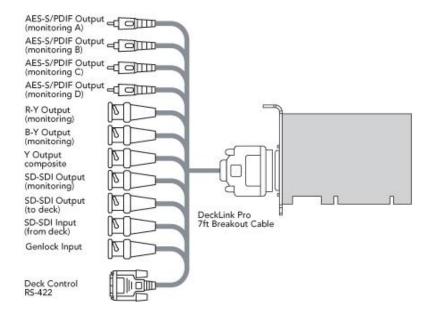
- Install Windows XP SP2
- Installare eventuali drivers della scheda madre e/o altre periferiche
 - BIOS upgrading
 - Chipset drivers
 - Vidceo card drivers
 - LAN drivers
 - RAID controller(advised)
- Reboot the PC
- Install DeckLink BlackMagic drivers (5.5.1 versione are advised). Follow the instructions

There's more than one version of DeckLink Blackmagic card, but installation steps are the same. Here's are the most used.

SDI VERSION



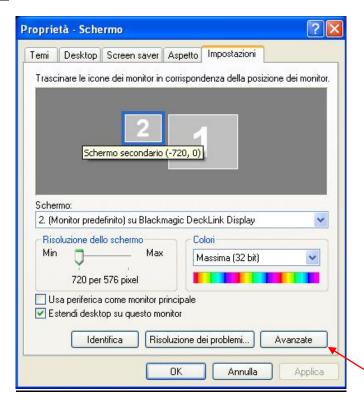
SDI VERSION + COMPOSITE



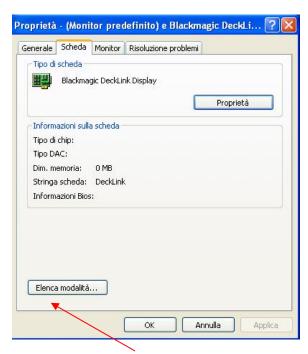
After installing drivers, you have to set some properties about the video card

For setting BlackMagic output in PAL o NTSC:

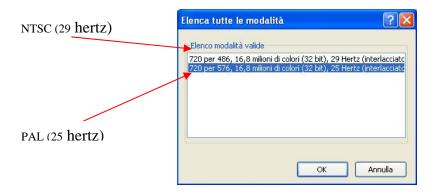
- o Right click on desktop
- o Click on Properties
- Select <u>Settings</u> table



Selezionare lo schermo secondario (assicurarsi che una volta cliccato nella casella "Schermo" compaia la scritta " ... su DeckLink BlackMagic", quindi cliccare su Avanzate



- Click on <u>Card</u> → <u>Elenco Modalità</u>
- o Dalla lista selezionare lo standard video che si desidera utilizzare

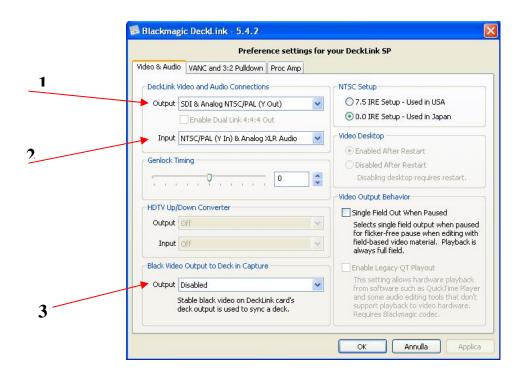


Nel caso in cui si voglia utilizzare l'uscita SDI della scheda BlackMagic:

- o Andare nel Pannello di Controllo
- Selezionare <u>DeckLink</u>

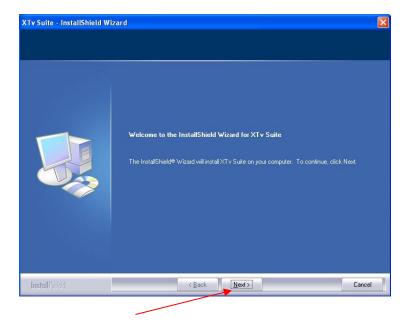


- 1. Impostare la casella Output in alto col valore "SDI & Analaog NTSC/PAL (Y OUT) "
- 2. Impostare Input_col valore "NTSC/PAL (Y IN) & Analog XLR Audio "
- 3. Impostare la casella Output in basso col valore "Disabled"

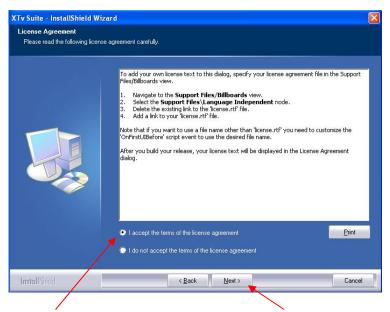


2.1. XTV SUITE INSTALLATION

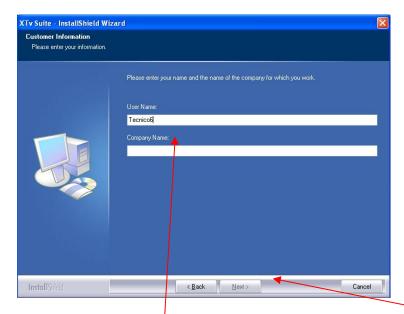
A wizard will guide you to the right software installation



Click on Next



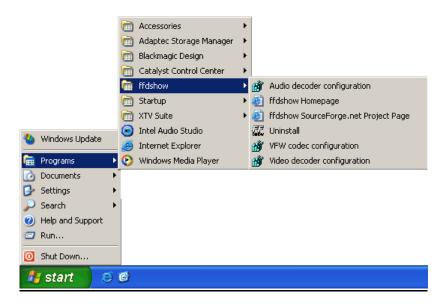
o Accept terms ,then click on Next



Insert username and society name than click on <u>Next</u>

Install FFDSHOW codecs (the file path is Program File Folder\XTVSuite\Utility).

VIDEO settings:



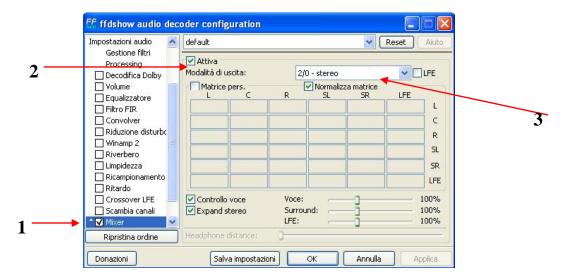
- o Click on <u>Start</u> → <u>All programs</u> → <u>Ffdshow</u> → <u>Video Decoder Configuration</u>
- o On the left menu select CODECS
 - In the right table find "MPEG2" e "MPEG IN AVI" rows, than in the second column select "LibAvCodec"



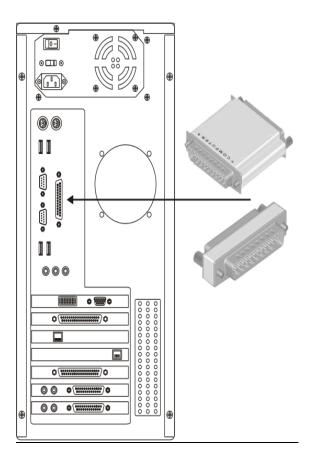
Click on OK

AUDIO settings:

- o Click on <u>Start</u> → <u>All programs</u> → <u>Ffdshow</u> → <u>Audio Decoder Configuration</u>
 - 1. On the left menu select MIXER
 - 2. Check the field "Active"
 - 3. Select as audio output mode "2/0 Stereo"



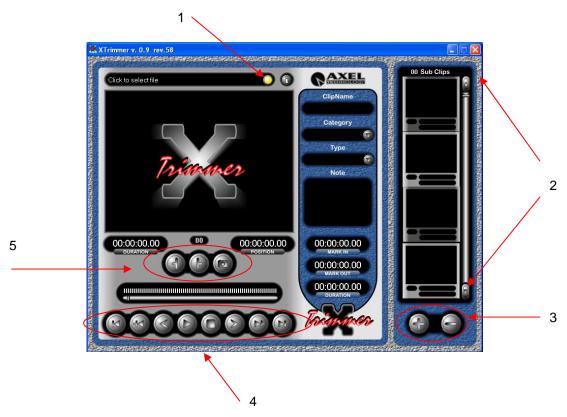
- o Click on OK
- Put the hardware key on the parallel port of your pc



Reboot the PC

3. X-TRIMMER

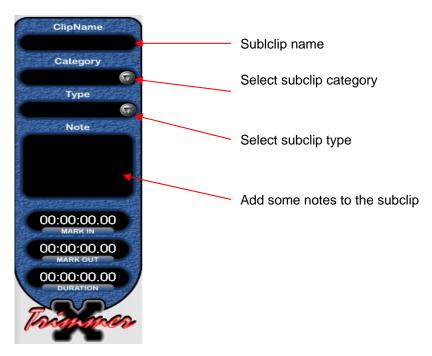
Xtrimmer is a software used for files marking. User interface, as shown in the picture below, is very simple



| 1 | | | Open the file browser where choose the file to edit |
|---|------------|--|---|
| 2 | | | Scrool bar for watching subclips inside the file |
| 3 | | | Add a new subclip. The new one will have the markin coinciding with the mark out of the previous subclip and the mark out coinciding with the last file frame |
| | | | Delete the selected subclip |
| | (X | | Point the cursor at the beginning or at the end of the file |
| | 5 V | | Point the cursor at the beginning or at the end of the subclip selected markers |
| 4 | | | Point the cursor the next or to the previou frame |
| | | | Play the file |
| | | | Pause the file |

| | | Stop the file |
|---|---|--|
| 5 | 4 | Set the subclip mark in |
| | P | Set the subclip mark out |
| | | Grab the current frame to associate with the subclip |

Every subclip can contains also more information, called metadata, usefull for clip management



All the information about subclips are stored directly inside the media file, without using database or extern files.

In this way you can copy media files in every NTFS format drives and the information will be always visible.

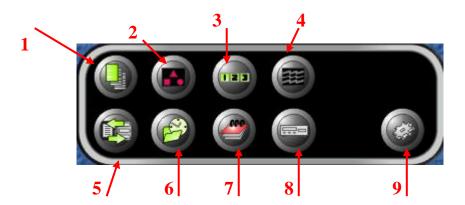
4. X-PLAYOUT

The first time you run the software, a Setup Wizard will start to configure the product (see the Cap.)

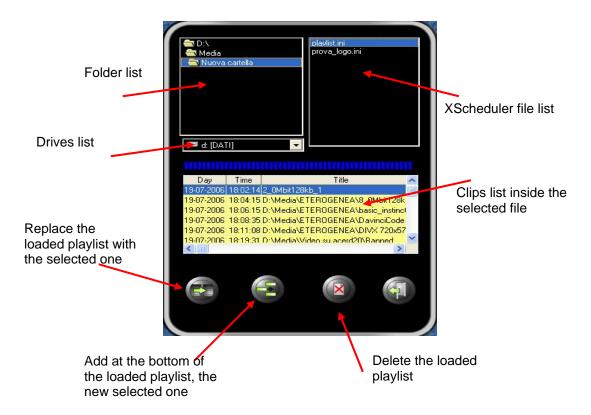
The main window is divided in three parts



4.1. MENU DESCRIPTION



4.1.1. LOAD PLAYLIST



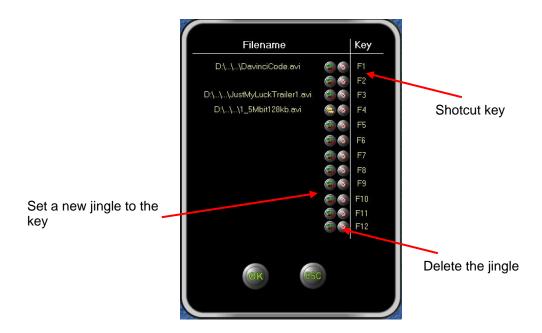
You can also add a partial playlist, just selecting the starting point

4.1.2. LOGO

The logo you select is always visibel on playout, and for each logo you can choose the position inside the screen

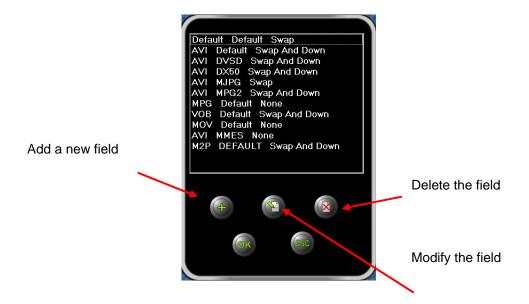


4.1.3. JINGLE MANAGEMENT



Jingles are clips always ready to go on air in every moment, just pressing the correct shotcut key. Immediately the playout will be switch.

4.1.4. FILES FIELDS



Each row is composed by three column

i. <u>EXTENSION</u>: file extension

ii. 4CC : it's a 4 char word, that show the codec code used for that kind of file

iii. FIELDS TYPE: it's the engine setting used by the software for that kind of file

If you change a value and press OK, the engine will adapt to the new settings immediatly

4.1.5. CHANGE VIEW

You can select which kind of view activate.

The default one has a graphical layout; the other one is composed by a simple text grid. Each clip (like prepare, replace, or remove) functions can be used in all the view



4.1.6. HYSTORY

XPlayout saves evrything that goes on air in a CSV text file. This file can be opened with almost all databse software like Micorsoft Access.

Default filename use the follow standard: yyyy_mm.csv

On the grid bottom, you can select which file you want to open.

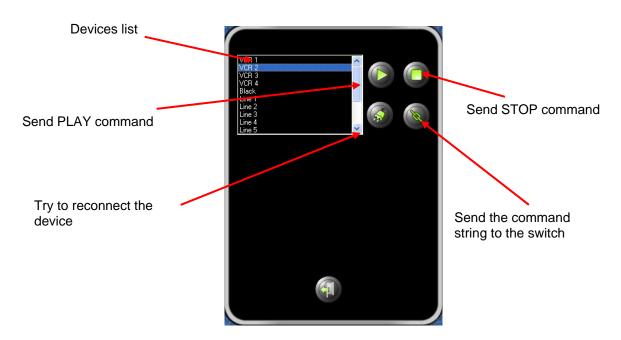


4.1.7. LOG FILE

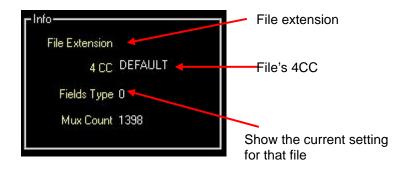
XPlayout saves information during operations



4.1.8. DEVICES



About HDR 1, you can see some usefull information about file type As you see in the picture below, you can find all the information you need to understand what kind of file is on air. Ususally it's usefull to see which is 4CC file code



4.2. SYSTEM CONFIGURATION

It is possible to set all devices parameters. If you press "SET", it will ask you if you want to reboot Xplayout to take effect all the changes

In all devices window, a field named "Routing switch" contains the command string to the switch

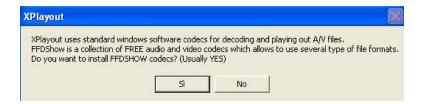
4.2.1. SETUP WIZARD

It's a wizard which will guide you to an easy setup of Xplayout, just following few steps

• Select video standard (PAL o NTSC)



• Select if you want to install FFDSHOW codecs

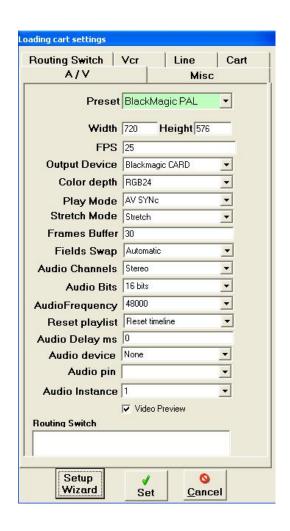


The wizard recognize what kind of video device is present. First at all it checks if a Blackmagic Decklink is present, than a DV device (internal or external). If none of them is present, the normal vga card will be set.

At the end of the wizard the readme.txt file will be show

A default clip will be load and loop mode will be activated. This clip will be show every time your start Xplayout until you press the Play button.

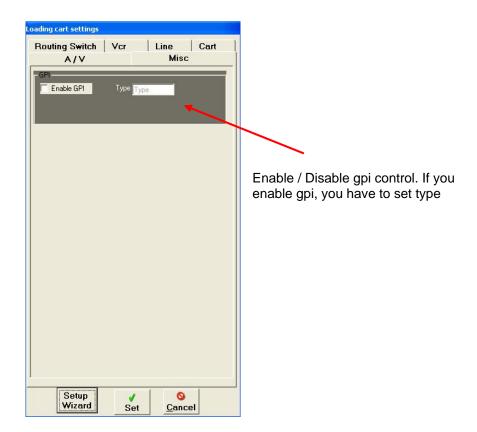
4.2.2. AUDIO / VIDEO



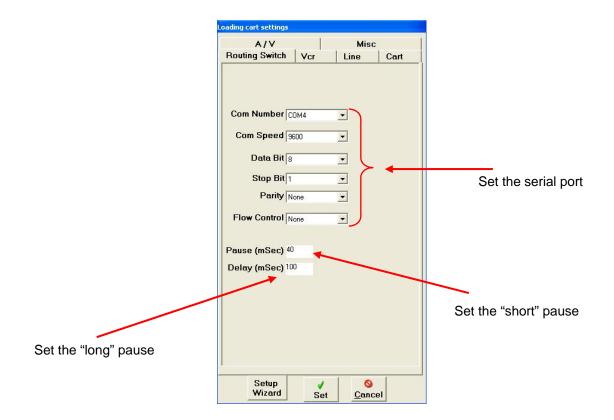
| Preset | Set default values for the selected devices. |
|---------------|--|
| Video Width | Set the video width |
| Video Height | Set the video height |
| FPS | Set the video frames |
| Output Device | MICROSOFT DV: set a DV hardware as output device, using Microsoft DV codecs MAINCONCEPT DV: set a DV hardware as output device, using Mainconcept DV codecs (where presents) BLACKMAGIC: Set the DeckLink BlackMagic as output device VGA: Set standard VGA video card as output device (es. Matrox G550) VGA VMR Set standard VGA video card as output device (es. ATI) |
| Color Depth | Set the color depth |
| Play Mode | RENDER ALL FRAMES: reander all A / V frames but out of sync errors may occure A/ SYNC: If necessary, skip some frames to maintain the synchronization |

| | STRETCH: strecth the video to the selected resolution |
|------------------|--|
| Stretch Mode | CROP: |
| Stretch wode | PRESERVE ASPECT: |
| | PRESERVE ASPECT NO LETTERBOX: |
| Frames Buffer | |
| Fields Swap | If you select "AUTOMATIC", XPlayout will choose automatically the right configuration |
| Audio Channels | Set the audio as STEREO or MONO |
| Audio Bits | Set the bits number used for audio |
| Audio Frequency | Set the audio frequency |
| | TIMELINE: If the playlist is blocked, a software reset is run |
| Reset Playlist | OUTPUT: If the playlist is blocked, an hardware reset is run. In this case, a discontinuity may occure on the output |
| Audio Delay (ms) | Set the delay or the prerun of the audio |
| Audio Device | Set the audio preview device |
| Audio Pin | Set the audio pin |
| Audio Instance | Set the instance (number) of the device |
| Video Preview | Enable / Disable preview window |

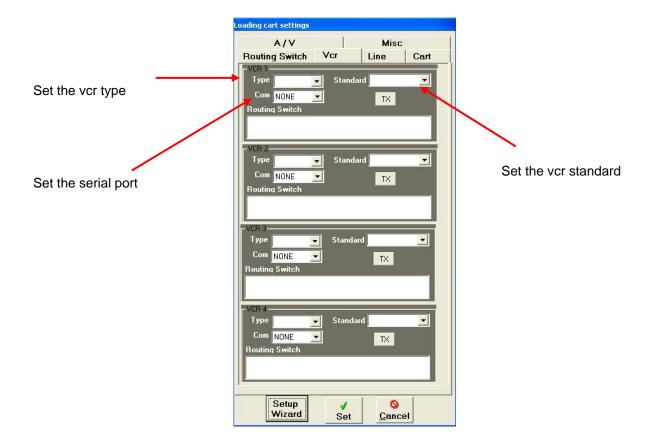
4.2.3. GPIS



4.2.4. SWITCHERS

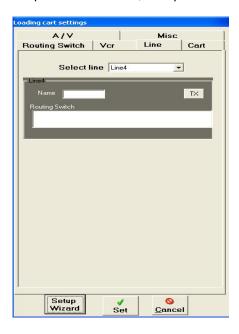


4.2.5. VCRS

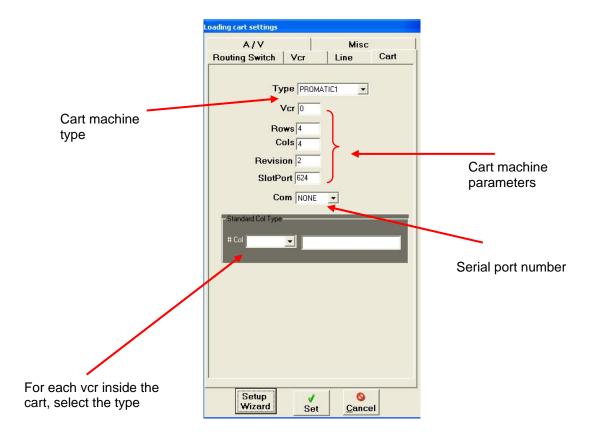


4.2.6. LINES

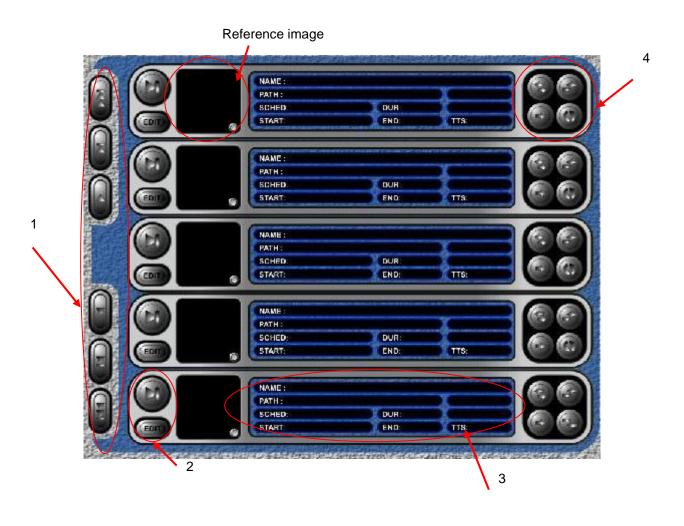
For this kind of device, there's no parameters to set, except for the crossing string for the switch



4.2.7. CART MACHINES



4.3. PLAYLIST INFORMATION



| | | Scroll the playlist to the beginning or to the end |
|--------------------|------|--|
| 1 | | Scroll to the next page or to the previous one |
| | | Scroll to the next clip or to the previous one |
| 2 | | Prepare the clip as the next one. If XPlayout is set to AUTO, the selected clip will go on air athe end of the current on air clip |
| | EDIT | Edit clip parameters |
| 3 Clip information | | n |
| | NAME | Clip name |

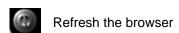
| | PATH | Source path |
|---|-------|--|
| | SCHED | Date and time set by XScheduler. |
| | DUR | Clip duration |
| | START | Show at what time the clip will be on air. This value is calculate dynamically. |
| | END | Show at what time the clip will be end. This value is calculate dynamically. |
| | TTS | Time To Start: Show how much time left to the clip onairing |
| | (2) | Replace the clip |
| 4 | | Inset a clip |
| 4 | | Delete the clip |
| | | Switch the clip with the next one. If user is pointing to the last clip, a new one will be add at the bottom of the playlist |

4.3.1. CLIP BROWSER



For adding or modify a clip just double click on the reference image, or on the file name, or on the subclip name

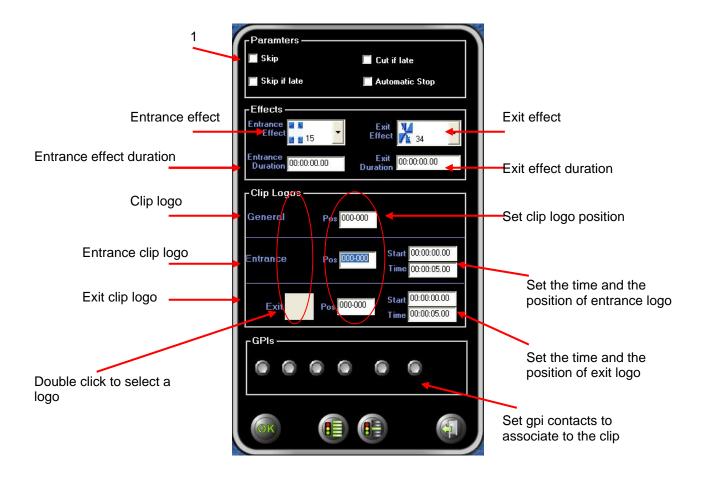
If the selected file was not edited by Xtrimmer, the retrieving of information (like reference image or duration) will take some seconds.



You can also add other type of event

- insert a black in the current playlist. Default duration is 5 seconds
- insert a line event, just choose the line number
- insert a vcr event, just typing the cassette name
- insert a playlist at the selected position

4.3.2. CLIP PARAMETERS



- 1. SKIP: the clip will be not played
- 2. SKIP IF LATE: if the delay is longer than the 80% of clip duration, the clip will be skipped
- 3. <u>CUT IF LATE</u>: if there's a delay or a prerun, the clip can be cut or stretch (to the TC Max value)
- 4. AUTO STOP: ate the end of the clip XPlayout will stop onairing

All changes will take effect only if you press OK

4.3.3. CLIP PREVIEW

In every reference image on the list, there's a button which allow you to watch the file preview even if you are on air.



All the changes are not saved inside playlist file but only inside XPlayout. If you try to reopen the playlist file with Xscheduler, the changes will be not loaded

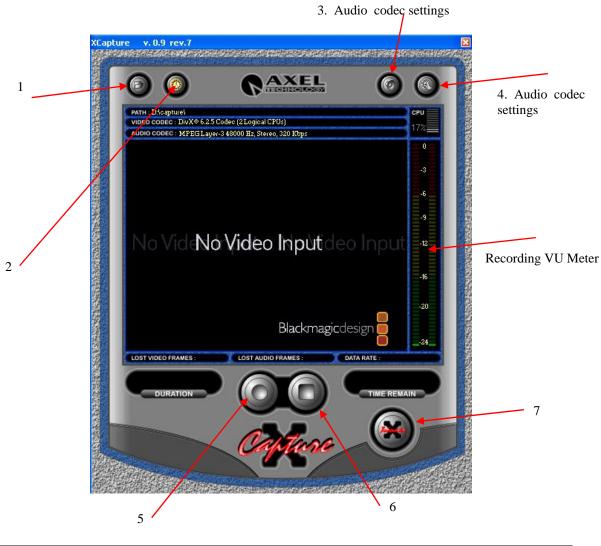
4.4. ON AIR INFORMATION



| | | Pause on air. In automatico, il software aggiungerà all'elenco dei brani successivi, in prima posizione, la parte rimanente della clip in onda |
|---|------|---|
| 1 | | Stop the on air |
| | | Enable / Disable loop mode. Every time a clip is on air, the same one will be added at the bottom of the playlist |
| | AUTO | If pressed, when you load a playlist and go onair, Xplayout start AUTO MODE. At the end of the clip, automatically, Xplayout go to the next song. If a clip is blocked, the softoware will skip to the next, so it will never stop. |
| 2 | MAN | If pressed, Xplayout goes on MANUAL MODE. The user must prepare and press play to put a clip on air. No automation is present in this situation. |

5. X-CAPTURE

XCapture is a software for digital recording using whichever audio and video codecs you want



| 1 | Set saving path |
|---|--|
| 2 | Create a recorder scheduler |
| 3 | Set audio codec |
| 4 | Set video codec |
| 5 | Start recording |
| 6 | Stop recording |
| 7 | Open XTrimmer loading the last file recorded |

When you start recording, the preview is shown on the main window. On the bottom you can read more information.

Lost Audio Frames
 Lost Video Frames
 → Number of audio lost frames
 → Number of video lost frames

Data Rate → Avarage data rate of current recording

Duartion → Recording duration
 Time Remain → Max duration available

When you press STOP, a window will appear asking you for a file name for the current recording. If you type nothing or press CANCEL, no file will be save and the current recording will be deleted.

If you decide to save the rcording, you can immediatly edit it with XTrimmer

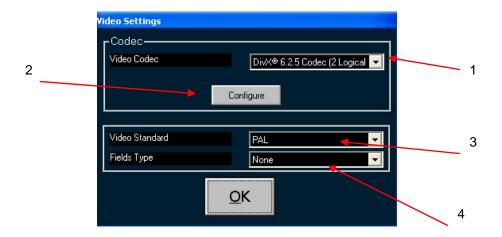
5.1. AUDIO CODEC SETTINGS



- 1. Select audio codec (MP3 is avoided)
- 2. Set audio codec parameters (for MP3, settingas avoided are 48000 Hz, 128 KBps)
- 3. Set recording volume

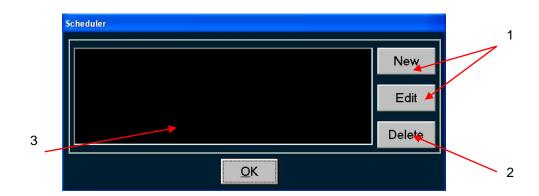


5.2. VIDEO CODEC SETTINGS

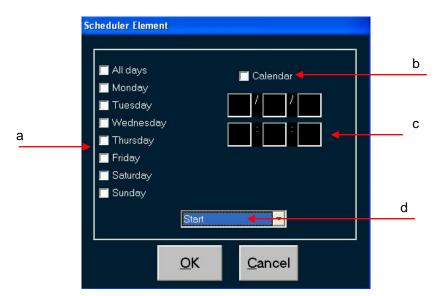


- 1. Select video codec (DivX is avoided)
- Select video codec (DIXX is avoided)
 Set video codec parameters
 Select video standard (PAL o NTSC)
 Select fields type

5.3. RECORDING SCHEDULER



1. Add (or modify) a schedule using the window below



- a. Select weekday.
- b. If you check this option, the schedule will start ONLY on the date you write
- c. Set schedule time
- d. Select schedule type (START or STOP)
- 2. Delete the selected schedule
- 3. Schedule list

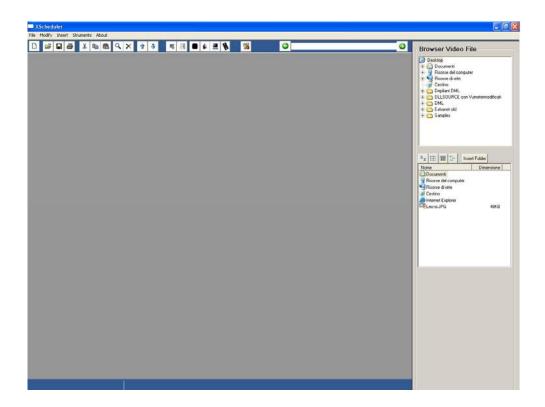
6. X-SCHEDULER

XScheduler is a software used for playlist creation and management.

You can add, beyond to media file, even extern events (like vcrs, blacks, lines) or jpg (or bmp) bitmap. The user interface is windows style so it can be used for everyone who can user Windows product.

The main window is divided in three parts:

- On the top, there's the menu with the toolbox bar
- On the right a browser can be shown just passing the mouse on the right border of the window
- On the center, the grid that contains the document



File Menu

- New
- Open
- Close
- Save
- Save As
- **Exports**
- **Print**
- Exit

- → Create a new document
- → Open a document
- → Close current document
- → Save current document
- → Save current document typing the file name
- → Export current document to other formts (html, csv, xml ..)
- → Print current document
- → Exit XScheduler

Modify Menu

- Undo
- → Undo last operation
- Cut

- → Cut selected clip(s)
- Copy
- → Copy selected clip(s)

Past

Delete

Move Up

Move Down

Select All

Find / Replace

Go To

→ Paste selected clip(s)

→ Delete selected clip(s)

→ Move up selected clip(s)

→ Move down selected clip(s)

→ Select all clip(s)

→ Find (or replace) a string inside the document

→ Point the cursor to the typed row

Insert Menu

Playlist

Clip

Pictue

Black

Line

HDR

VCR

Empty

→ Add a playlist to the document

→ Add a clip to the document

→ Add a bitmap (bmp or jpg) to the document

→ Add a "black" event to the document

→ Add a "line" event to the document

→ Add a "hdr" event to the document

→ Add a "vcr" event to the document

→ Add an "empty" event to the document

Tools Menu

XTrimmer

→ Open Xtrimeer loading the selected file

Check files

Options

→ Check the documents → Configure XSCheduler