ShowKino user guide

Showkino aims to manage video feedback on the sound engineer's cart. Once configured, the software requires no manipulation during the work phases. The system will record video, replay video, and be transparent automatically.

In this document PVR (Personal Video Recorder) refers to the hardware part of the system and ShowKino refers to the software driving the PVR.

The 3 states of the PVR
1 - Pass Through state
Video entering the PVR is duplicated on its video output. The PVR is transparent.

2 - Recording state
The audio recorder starts recording. The PVR records the video.
When the audio recording stops, the PVR also stops recording the video feedback.

3 - Synchronous replay state
When the PVR is not in the recording state, it
- reads the time code transmitted by the audio recorder
- continuously searches previously recorded elements for a code corresponding to the one received. If the audio recorder timecode is founded, the PVR switches to playback mode and plays the synchronous video corresponding to the audio.

A patent application has been filed with the relevant authorities to protect this system.

How to wired the PVR

Connect an USB power supply to the PVR.
Connect the HDMI video out of the PVR to your monitor.
Connect a mouse to the PVR. It is enough for the setup and control the ShowKino software.
Connect your video signal to the USB video capture board of the PVR
Connect LTC timecode output of your audio recorder to the LTC input of the PVR

For audio recorders not able to provide a LTC including record information, the tally signal output recorder needs to be wired to the tally input of the PVR to trigger the video recording state.

Depending of the choice of always mode you may have to power ON the PVR pressing a button at the rear of the case.

The start guide is divided in 4 parts
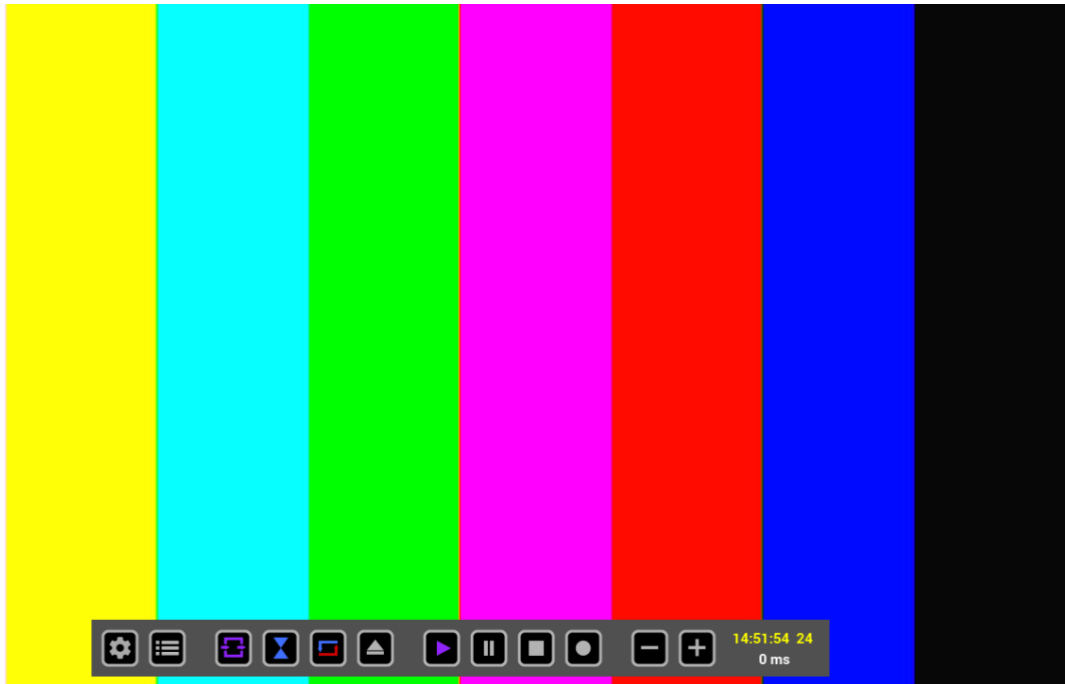
1- A tour of the ShowKino screens and basic settings

The startup screen #1

The color bar depends of the USB video card in use. Sometimes you will only get a black screen. Congratulation your video bard is correctly detected

A transport tools bar status is displayed at the bottom of the screen

The startup screen #2

The video card in use is not detected or not running correctly.

You can try to
        Restart the application (see next page)
        Ungplug / RePlug USB video board
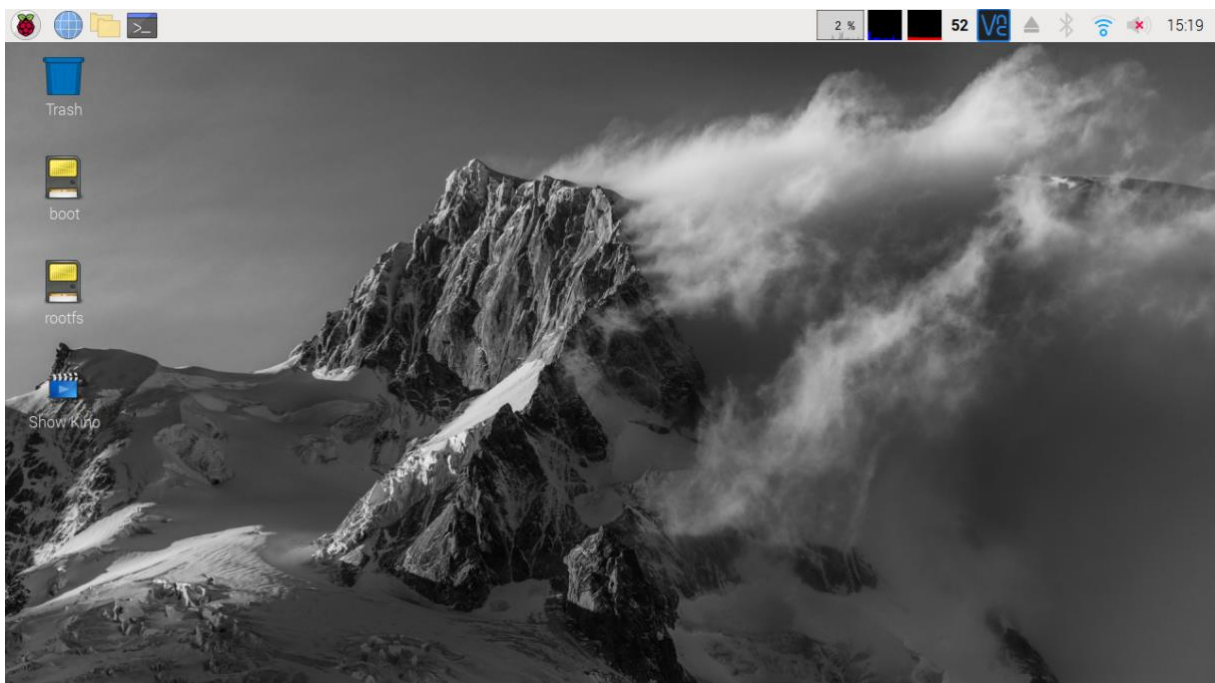   Switch off the PVR and restart it

Refer to the DIY guide regarding hardware installation and specifications.

How to quit the ShowKino application and restart it ?

You have to press 3 times on the STOP button of the transport tool and answer YES.

You will access to the raspberry Pi desktop. To restart ShowKino, double click on s-ShowKino Icon. A clean shutdown of the PVR is available using clicking on the desktop raspberry icon.

At start or reboot of the PVR, the ShowKino application runs automatically.

ShowKino and input video
as soon as a video signal is sent to the usb video card input it will be displayed on PVR output, this is the pass through state.
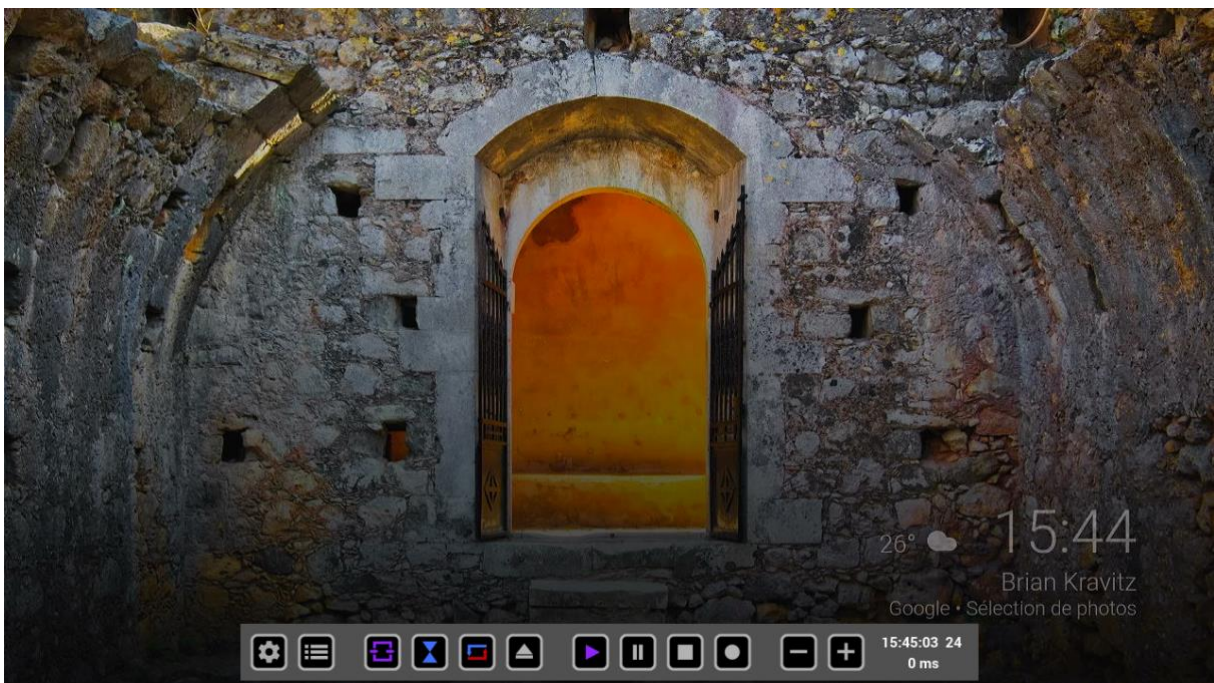

You can notice the purple play triangle corresponding to that state.
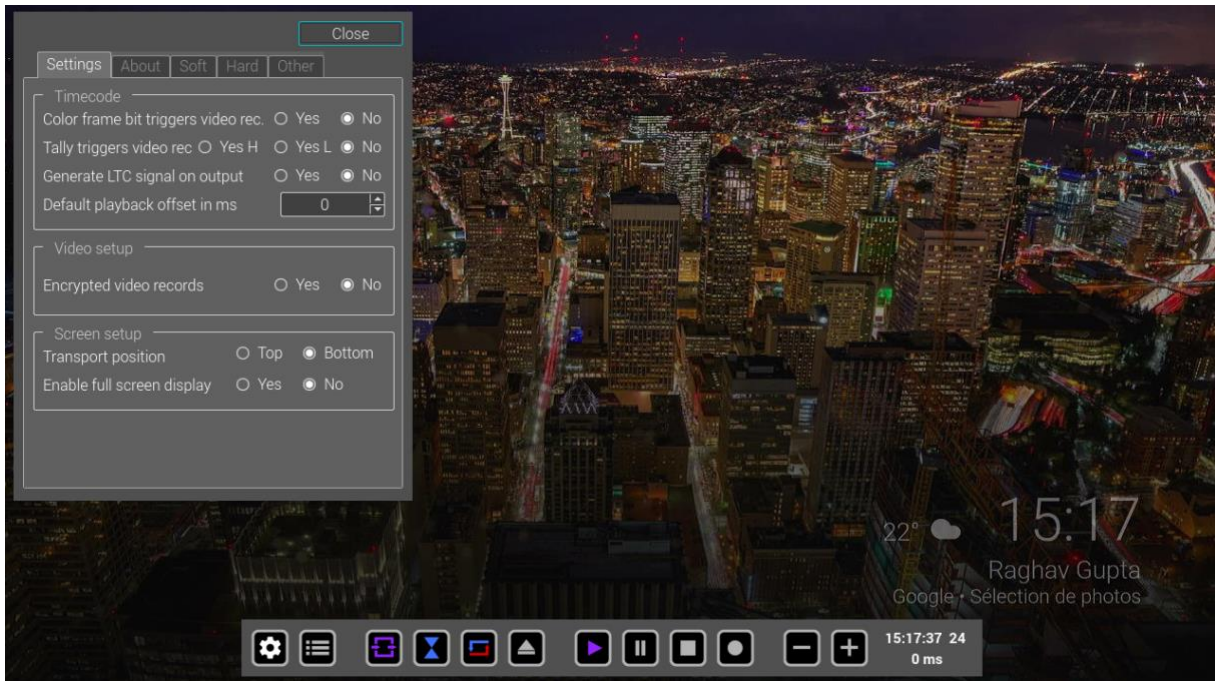
Showkino and Input timecode
The timecode is YELLOW as above, NO LTC timecode is decoded,
The timecode is WHITE as below, LTC timecode is successfully decoded.
On some audio recorder the output LTC level can be adjusted, select a high level.
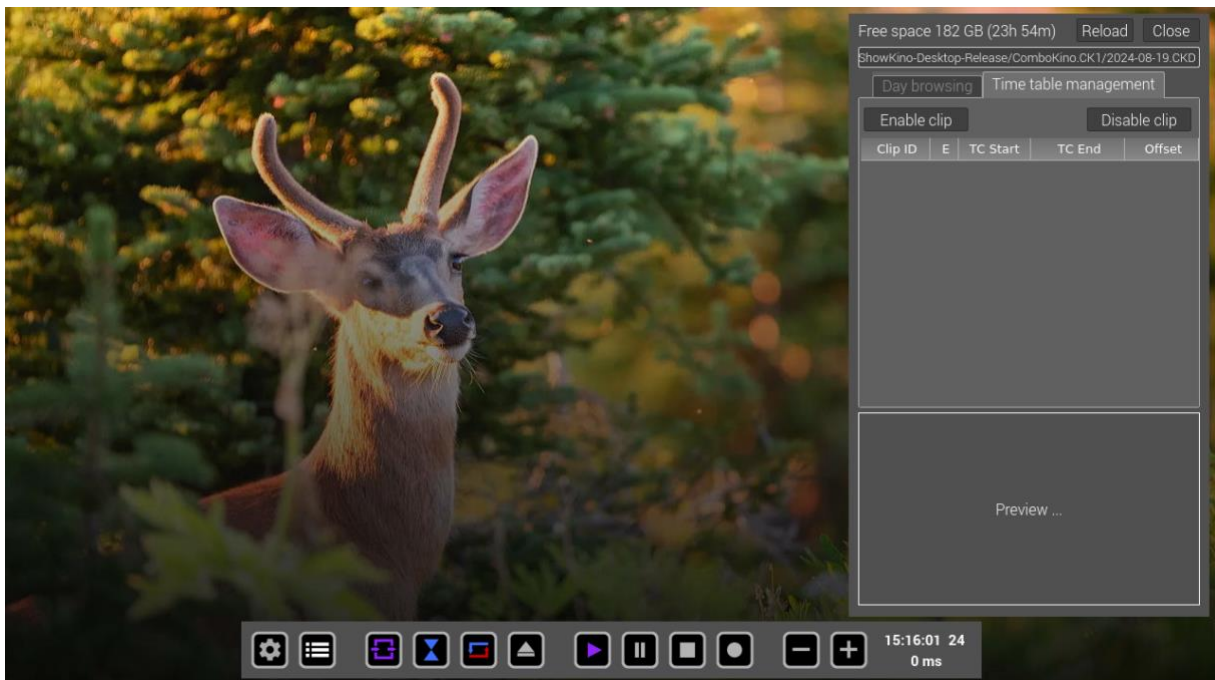
ShowKino settings dialog box
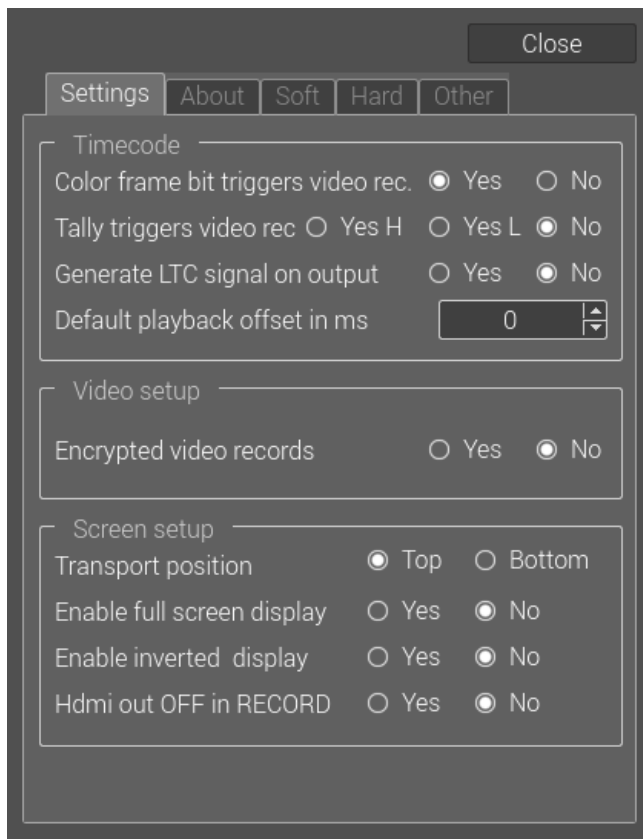

Click on the setting wheel icon

ShowKino time table dialog box

Click on hamburger icon

Note: Using mouse right click anywhere on screen, transport tools and time table can be quickly displayed or hidden.

ShowKino general settings

Color frame bit triggers video rec:
Set to **YES** for the compatible audio recorders
Set to **NO** for the other recorders

Tally triggers video REC:
To externally control the video record state of the PVR, an external signal can be used.
With **Yes H**(for high) **Yes L** (Low) you can define the state switch matching the record state of the external signal

Generate LTC signal on output:
Set to **YES** to link devices using PVR LTC output
Set to **NO** if a single PVR device is used.

Default play back offset
After a few tries, if you find a delay value improving the playback synchronization of your video, this delay can be entered in the settings parameter. It will then be automatically included in each new video clip.

Hdmi out OFF in Record:
This parameter can only be used with an HDMI/SDI bidirectional converter
If **YES** is selected, the HDMI out of the PVR is switched OFF during record state.
The converter will internally loop the HD SDI Input to the HD-SDI output, so the delay is minimized and the optimal fluidity of an incoming video stream is preserved.

ShowKino settings / About

This dialog tab shows you the license status of the ShowKino application.

You can request a license or contact the support scanning the QR code with your smart phone. It will pre create an email in your smartphone.

To update your license status, the PVR needs to be connected to the internet. Once it has been updated, no internet connection is needed to run ShowKino application.
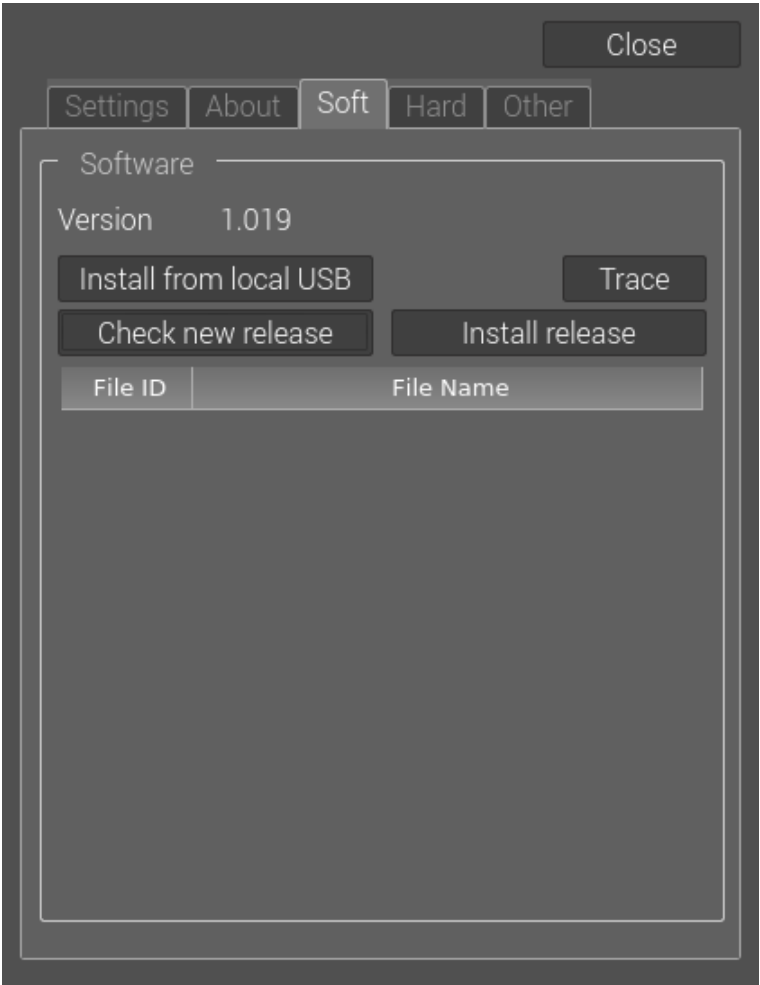
To connect the PVR you can use
A wired access using an ethernet cable plug to the PVR

or

A Wifi connection see sections Connect the PVR using your smartphone connection sharing
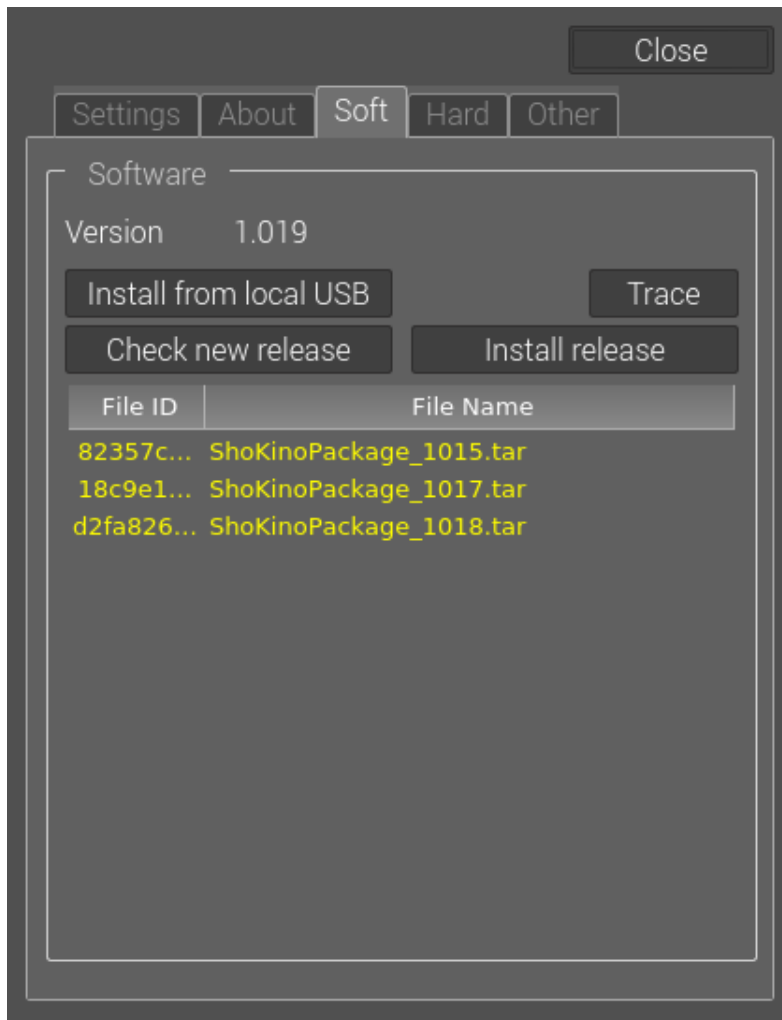
ShowKino settings / Soft

This screen is dedicated to the software update.

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1 – Using a web connection

To download the ShowKino software, PVR needs to be connected to the internet.
Details are available in chapter 4 PVR advanced features

Press Check new release to get the list of the available released.

Select the relevant version and press Install release to upgrade or downgrade ShowKino.

During the installation process, ShowKino software will be closed and will restart automatically after few seconds

2 – Using an USB device to provide the ShowKino release

Once you have downloaded the ShowKinoPackage on a third-party device, copy it to an USB storage device (e.g. USB stick)
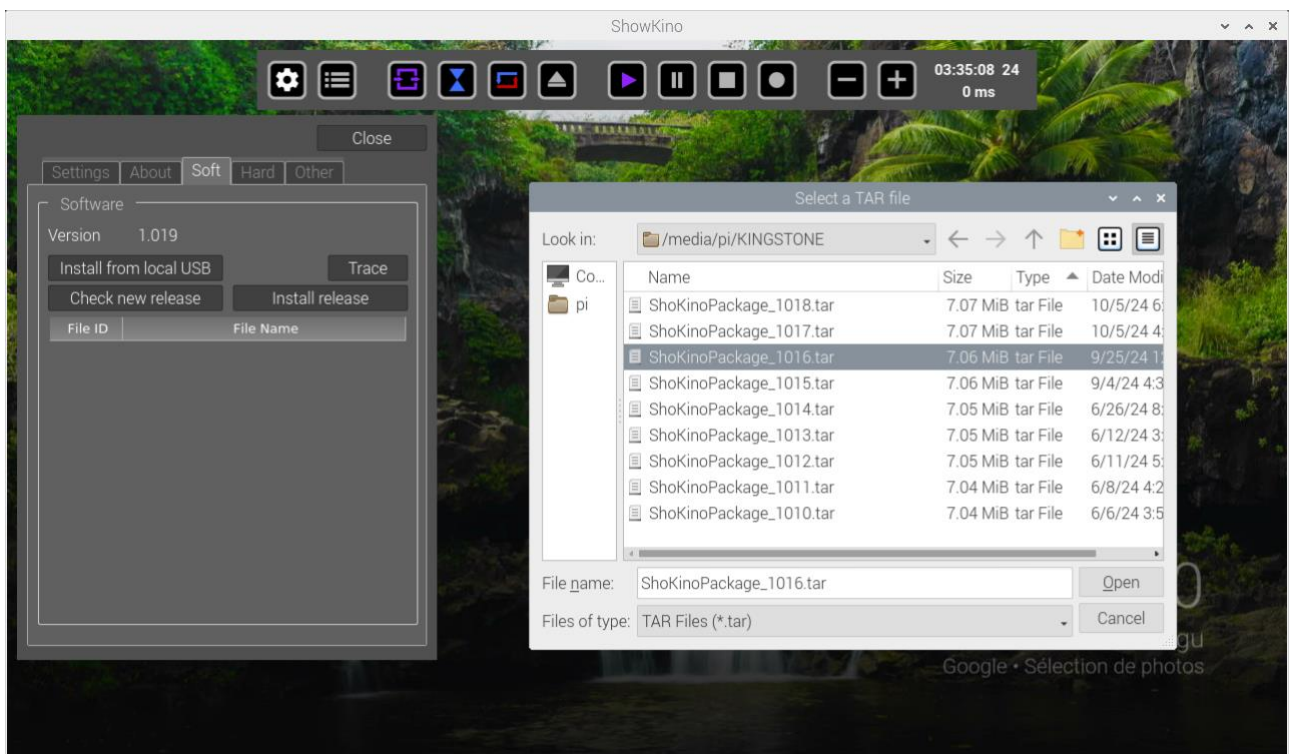For compatibility the USB stick needs to be exFAT or FAT32 formatted.

Plug the USB device on the PVR.

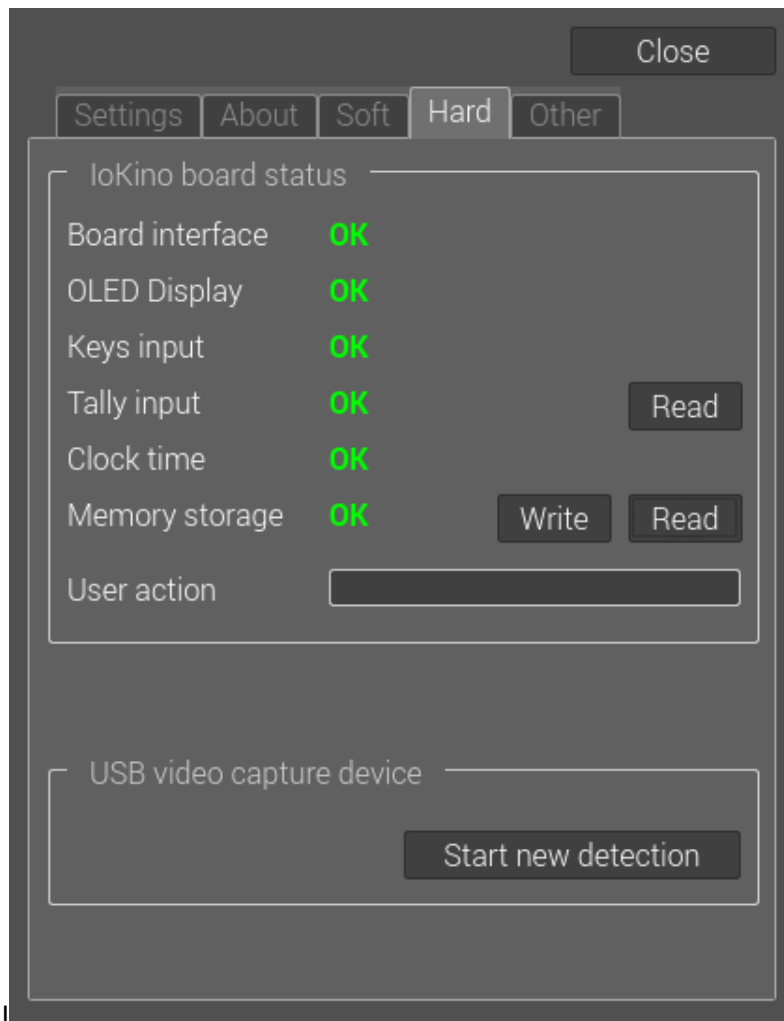In software tab click on Install from local USB

A browsing dialog box will show up, select the relevant version and click on Open in the browsing dialog box

A confirmation will pop up to start the process.

During the installation process, ShowKino software will be closed and will restart automatically after few seconds
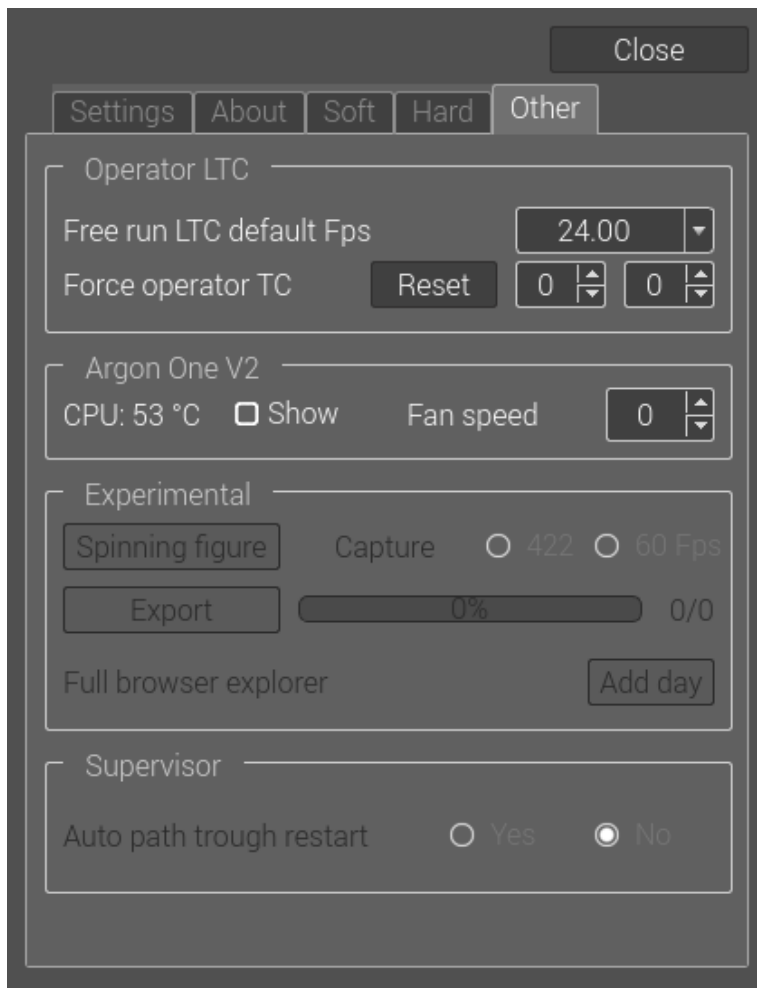
ShowKino settings / Hard

This tab displays the hardware status of the dedicated board in use on the PVR.

Note: depending of the hardware board in use, some of the features can be unavailable.

In case of trouble on input video stream, running **Start new detection** can fix the problem
It depends of the USB video capture card in use.
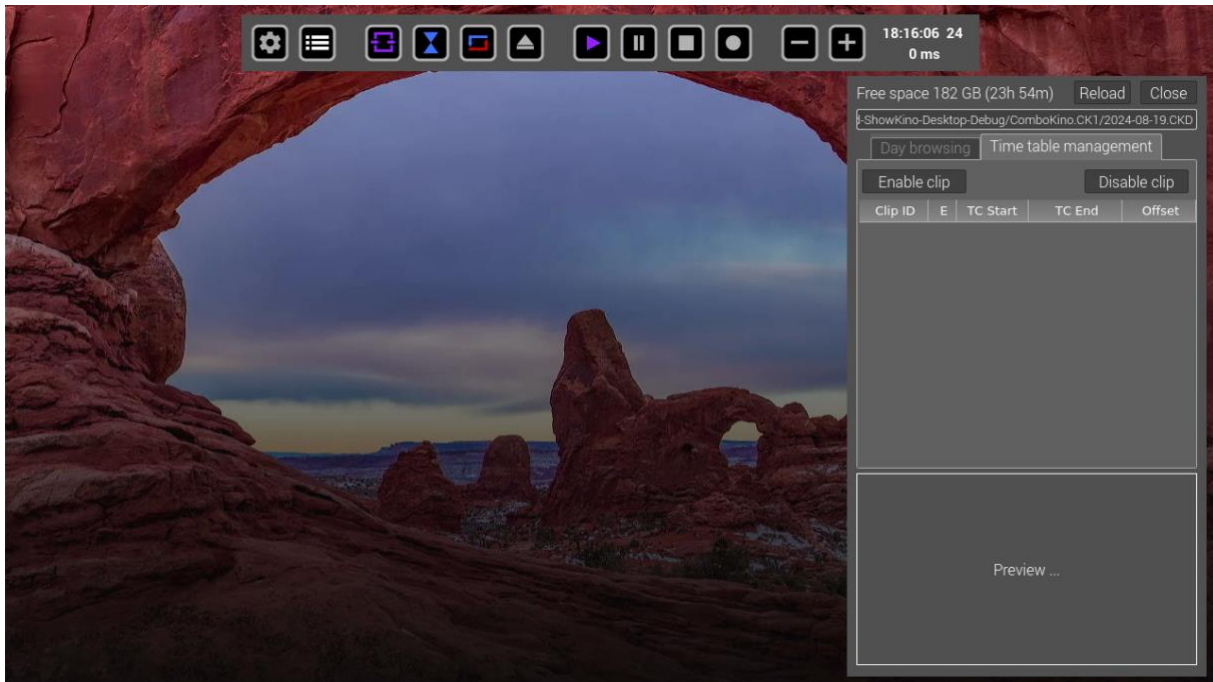
ShowKino settings / Other

This tab is dedicated for software testing and experimental features.
It is not supposed to be used on the set.

You can notice, an **Argon One V2 Fan speed control**, but the original fan of the case is noisy.
If you enable it, it will be automatically switched OFF when a recording state is detected and restored at the end of the record.

The CPU temperature can be displayed in the transport bar by checking Show.

ShowKino Time Table

It can be displayed clicking on the Hamburger icon.

The Time Table includes two tabs **Day browsing** and **Time table management**.

Time table management display / manage all the video clip that are ready to be played as soon as a corresponding LTC timecode is decoded.

Day browsing display / days all working days that have been created on the PVR.

At start both are empty. You will find details and how to operate later in the user guide.

2 - How operates ShowKino application (the main feature)

The 3 states of the PVR

1 - Pass Through state
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2 - Recording state
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When the audio recording stops, the PVR also stops recording the video feedback.

3 - Synchronous replay state
When the PVR is not in the recording state, it
- reads the time code transmitted by the audio recorder
- continuously searches previously recorded elements for a code corresponding to the one received. If the audio recorder's playback timecode is founded, the PVR switches to playback mode and plays the synchronous video corresponding to the audio.

To set ShowKino in automatic mode, the parameters as below

- Enable Pass through (purple sign)
- Enable Sync (blue sign)
- Enable automatic recording switch state (red and blue sign)
- Disable manual access to video clip

The first tree parameters are colored, they are enabled.

THIS IS THE REFERENCE SETTING

1 - Pass Through state

The timecode is in white means that the timecode is successfully decoded.
The purple play triangle indicates that the output video is a replication of the input video.
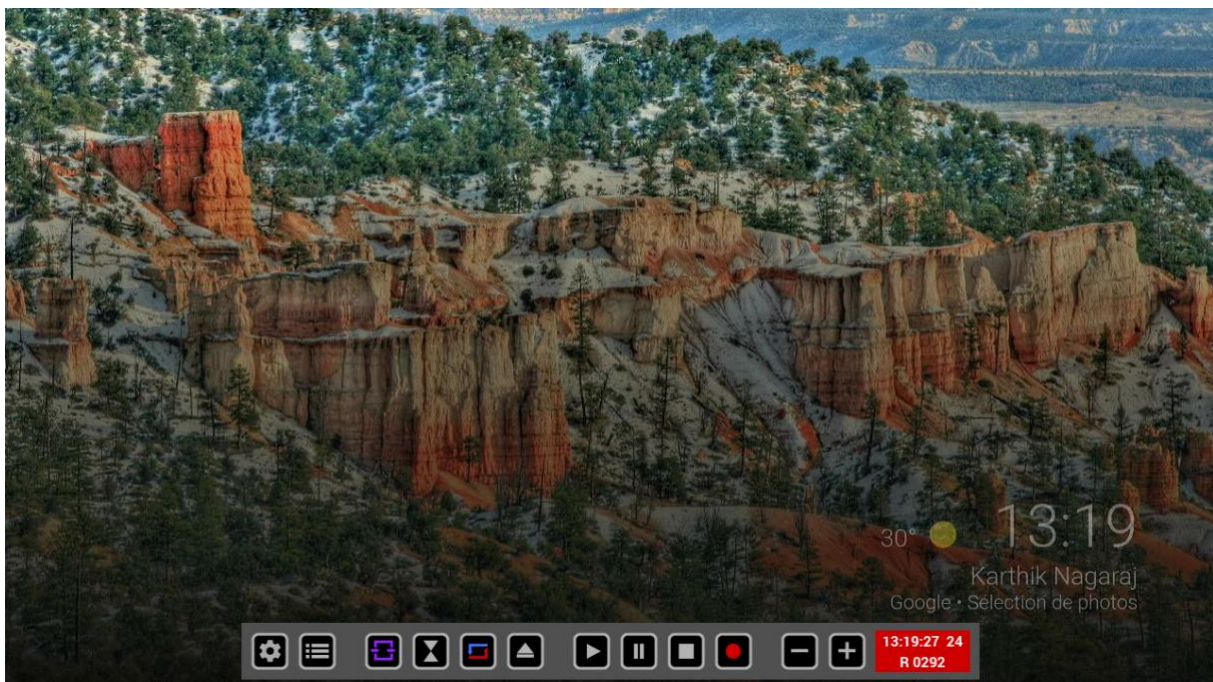
2 - Recording state

ON AUDIO RECORDER SIDE: Switch it to RECORD position.

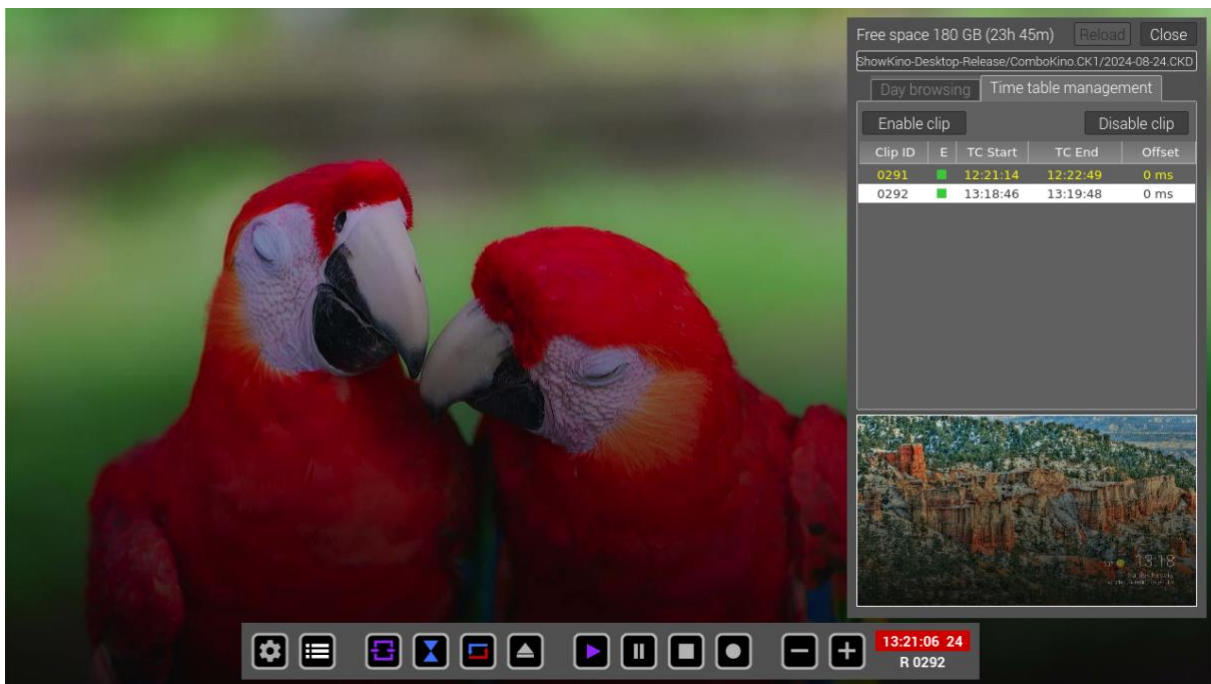The record icon lights on in red in the transport tool bar.
The number **0292,** below the time code, is the current record video clip ID.

The red LTC background notify that the recording state has been triggered by the LTC content.

Note: The video recorded on the PVR uses its own format and is not available to be play back outside of SowKino software.

ON AUDIO RECORDER SIDE STOP the recording.

The transport triangle switches back to play purple.

If you open the time table dialog box (just right click mouse anywhere in the screen) the recorded video clip ID **0292** will be in the list.

Note Using mouse right click anywhere on screen, transport tools, time table can be quickly displayed or hidden.
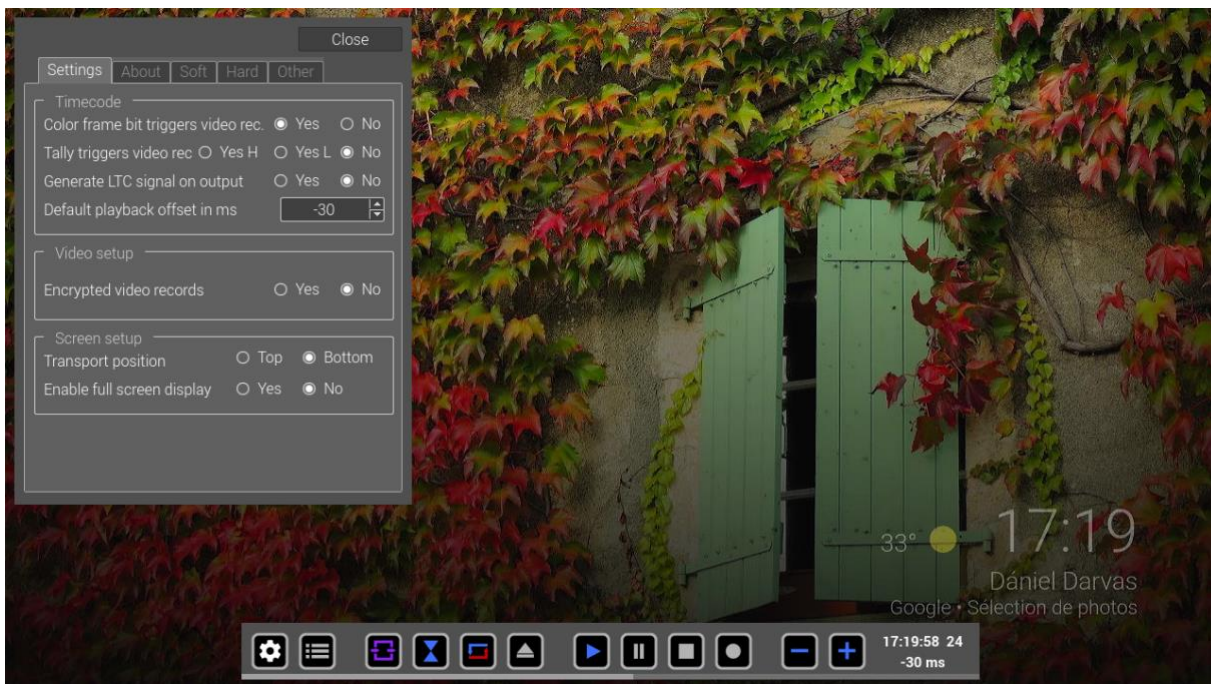
3 - Synchronous replay state

ON AUDIO RECORDER SIDE: Switch it to PLAY position, and play the last recorded audio file.

The blue play triangle indicates that the video output is the currently matching to a video in sync with the audio playback

You can adjust a video offset by clicking on plus and minus button (it should a minus offset). Once you are happy with the offset it can be inserted in *Default play back offset* field of the settings. Your offset will be applied to all new recorded video clips.

See bellow a -30 ms offset.

ON AUDIO RECORDER SIDE: Leave the PLAY position and move to standby

The transport bar will switch back to pass through state.
Video entering the PVR is duplicated on its video output. The PVR is transparent

As described above, once the video offset adjusted, the user only operates his audio recorder, and no user actions are needed on in ShowKino application.

3 - The user-controlled features

The ShowKino is not designed to manually manage the states (pass through, record and sync). Nevertheless, it is possible to enable/disable these functions.

Disable the automatic switch to record video clip.

Disable the automatic switch to synchronous replay mode.

Disable pass through mode (it freezes the last picture)

ShowKino Time table management

It can be displayed clicking on the Hamburger icon or **u**sing mouse right click anywhere on screen, transport tools, time table can be quickly displayed or hidden.

The remaining free space displayed at the top of the box.

It displays the list of all video clip available for playback with timecode In/Out and playback offset. Highlighting a line shows a preview of the first picture of the clip.

Enable clip / Disable clip

In some situation it can be useful to be able to disable the use of a video clip during the synchronous replay state.

For example, in the case of 2 video clips with overlapping time code.

It allows the user to include or exclude a specific clip of the playback list. It stays available but it won't be played.

When a video clip is disable, a red square is displayed on its line.

The multiple clip selection is available:
hold down the left mouse button over the list of the video clips you want to select.

ShowKino Time table / Day browsing

The date column displays the list of your working days with the number of video clip available for this shooting date. Highlighting a line shows a preview of the first picture of the first clip within the day.

Erase Day:
After a confirmation message box, all the clip of the corresponding day will be definitively erased without possible recovery.
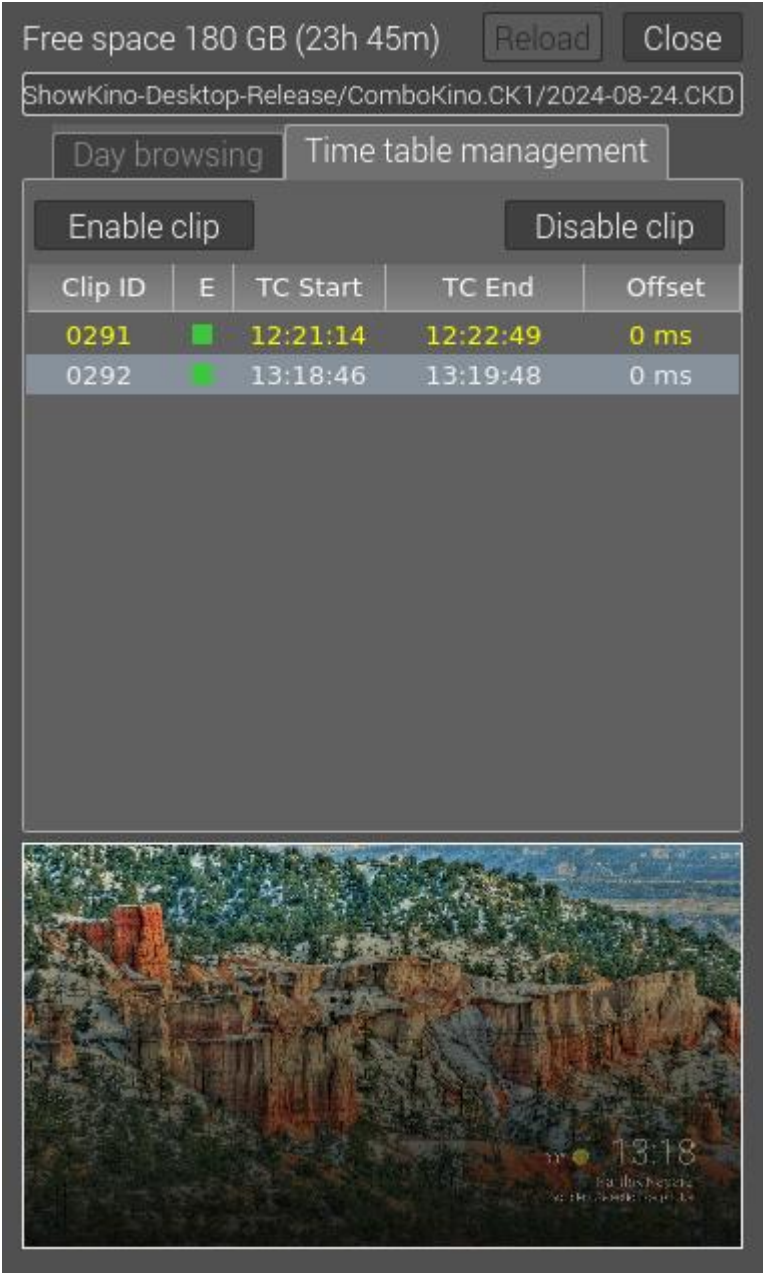
Set single day:
All the video clip inside the selected day will be added in the time table to be available as playback video. The time table will only contain video clips from that day.

Add a day
All the video clip inside the selected day will be added in the time table to be available as playback video. If video clips were already present in the time table, they will be retained.

At ShowKino start up, if a new calendar day is detected, a new day folder will be automatically created. This day folder will be the target folder of all new video clip records.

The recording day folder is displayed at the right side of the dialog box top field.

When a function "**set single day**" or "**add a day**" has been used to modify the content of the time table by the user, you can notice that the day in the top field is in italic. It matches the last user action.

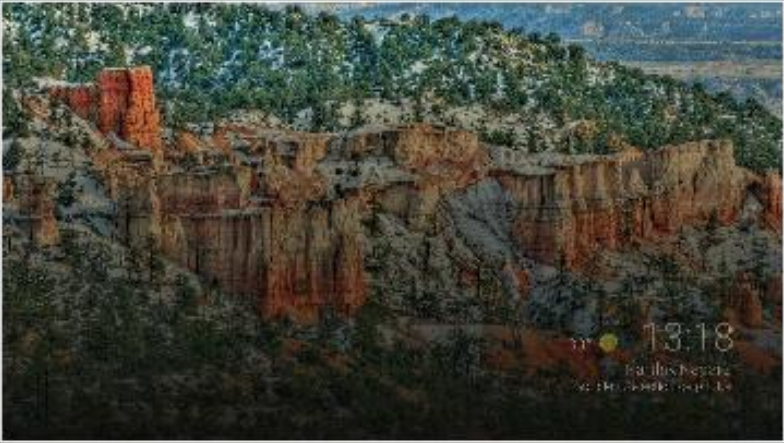As soon as a new clip is recorded, the displayed date switches back to the new records target day.

Play back manually a video clip outside of the sync process
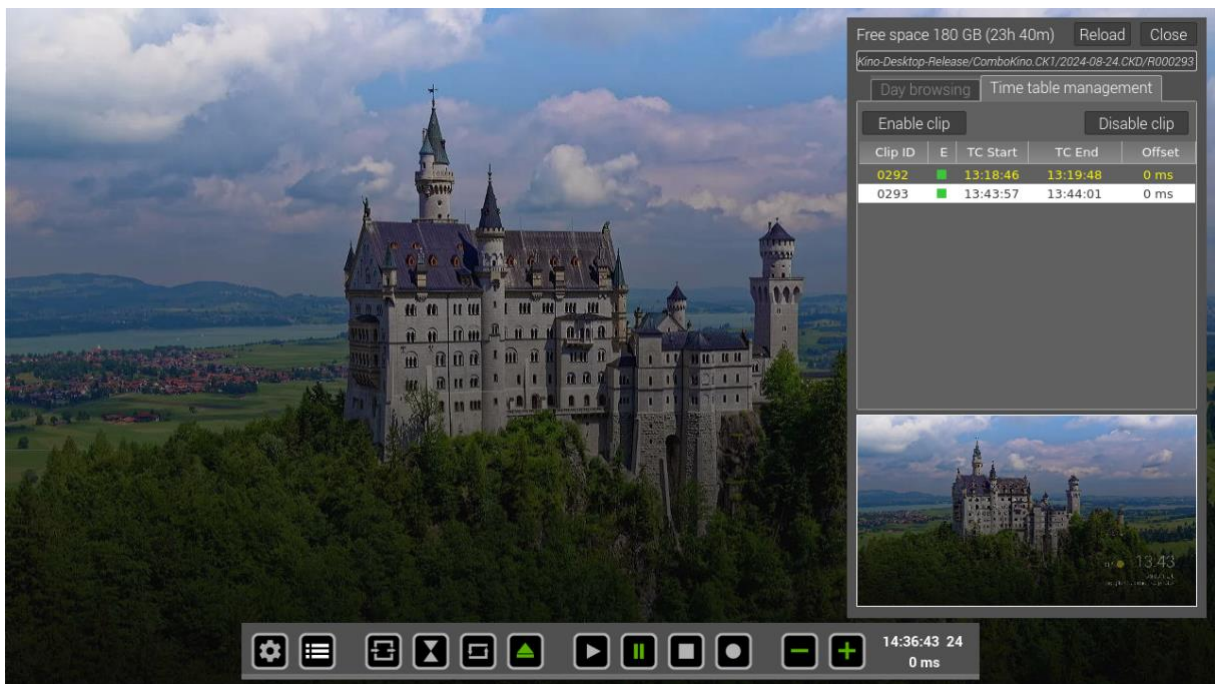
This is a side function of the showkino application.

The prerequisites for this feature
- Disable Pass through
- Disable Sync
- Disable automatic recording switch state
- Enable manual access to video clip
- Have a running timecode (in white) or in free run timecode (in yellow)

Open the Time Table dialog box and double click on the video you want to play.

Click on PLAY icon

You can notice a progress bar at the bottom of the transport tool box.

Once you are in pause, you can click within the progress bar to reach a position within the clip. Using plus and minus you can move forward and backward frame by frame.

4 – PVR advanced features

Connect the PVR to the internet using your smartphone connection sharing
This can be useful to get the your ShowKino license and to update the software version.

On iOS (iPhone):
1. **Open Settings**: Go to the Settings app on your iPhone.
2. **Personal Hotspot**: Tap on "Personal Hotspot". If you don't see this option, tap on "Cellular" and then "Set Up Personal Hotspot".
3. **Enable Hotspot**: Toggle the switch to turn on "Allow Others to Join". This will enable your iPhone's hotspot.
4. **Set Password**: You can set a Wi-Fi password by tapping on "Wi-Fi Password" and entering a strong password.
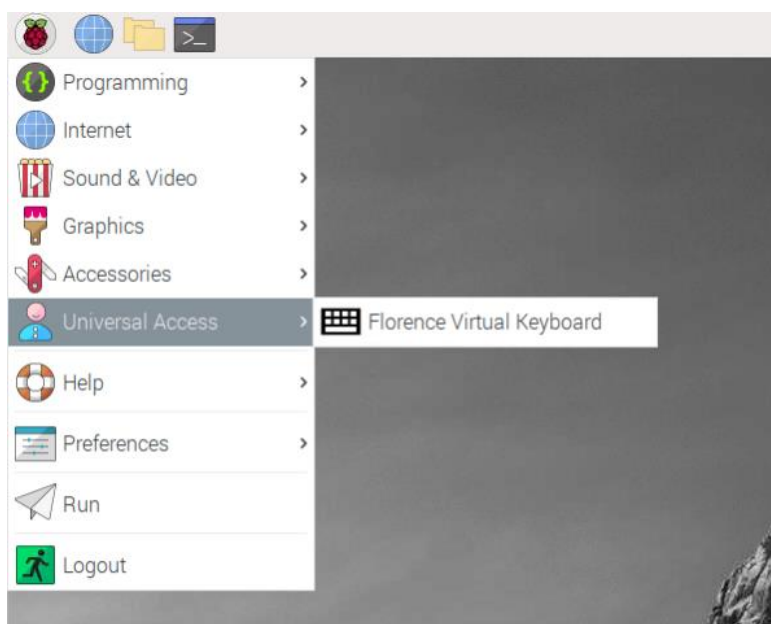
On Android:
1. **Open Settings**: Go to the Settings app on your Android device.
2. **Network & Internet**: Tap on "Network & Internet" or "Connections" depending on your device.
3. **Hotspot & Tethering**: Select "Hotspot & Tethering".
4. **Enable Hotspot**: Toggle the switch to turn on "Wi-Fi Hotspot". You can also choose to enable Bluetooth or USB tethering.
5. **Set Up Hotspot**: Tap on "Set up Wi-Fi hotspot" to configure the network name, security type, and password.
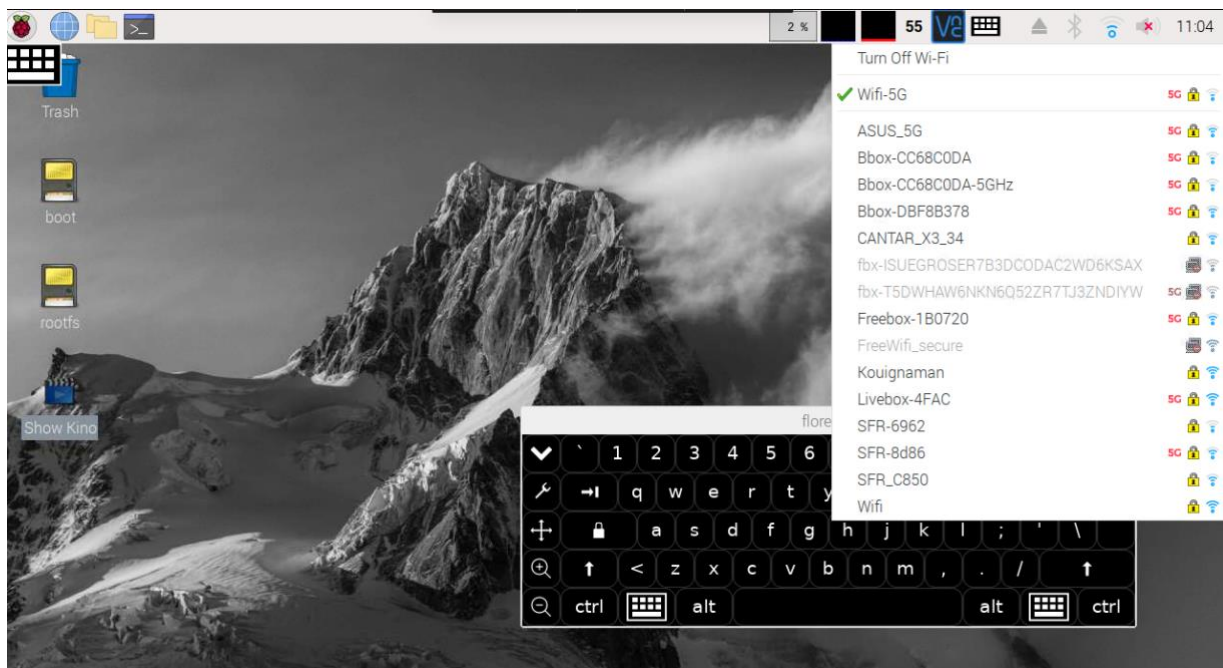
On PVR side:
Quit the ShowKino application (press 3 times on the STOP button of the transport tool and answer YES).

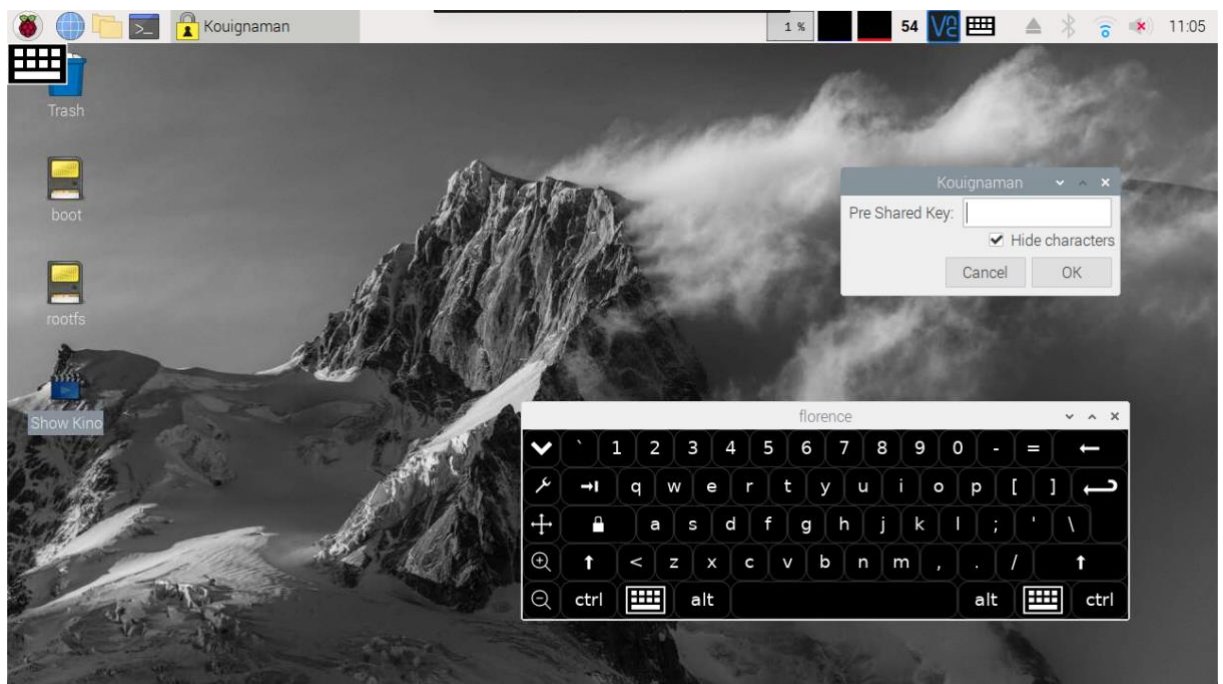Once you are on desktop enable the virtual keyboard

Or connect a physical keyboard to the PVR

Locate the Wi-Fi Icon: In the upper right-hand corner of the desktop, you will see a Wi-Fi icon. Click on it.

Select Network: The system will scan for available Wi-Fi networks. Click on the network you wish to connect to (You will find your smartphone shared network).

Enter Password: If the network is secured, you will be prompted to enter the Wi-Fi password. Enter it and click "OK".
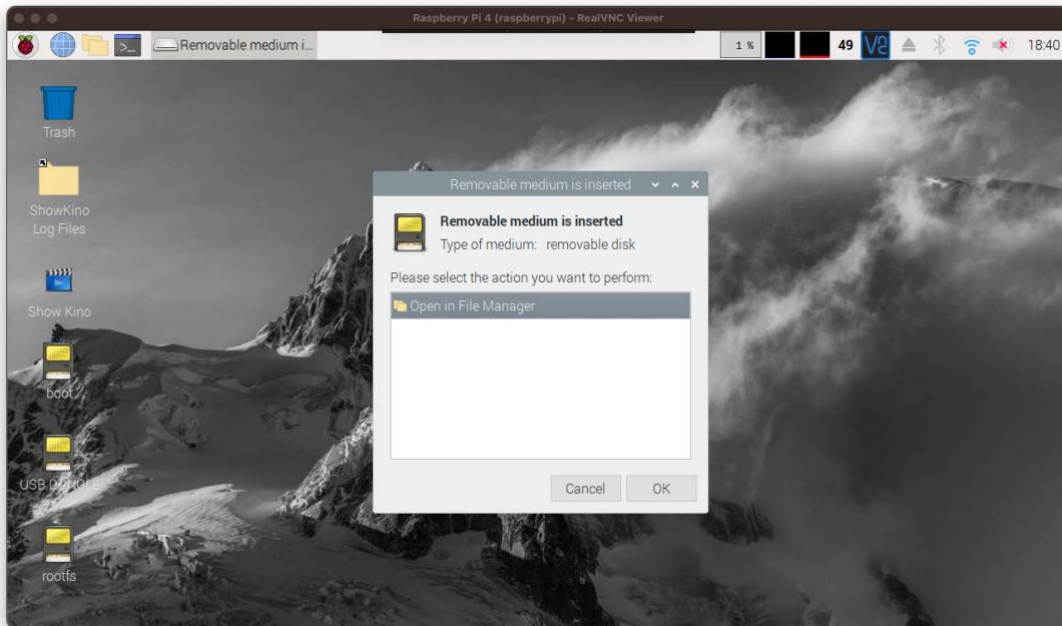

Connect: Your Raspberry Pi should now connect to the Wi-Fi network
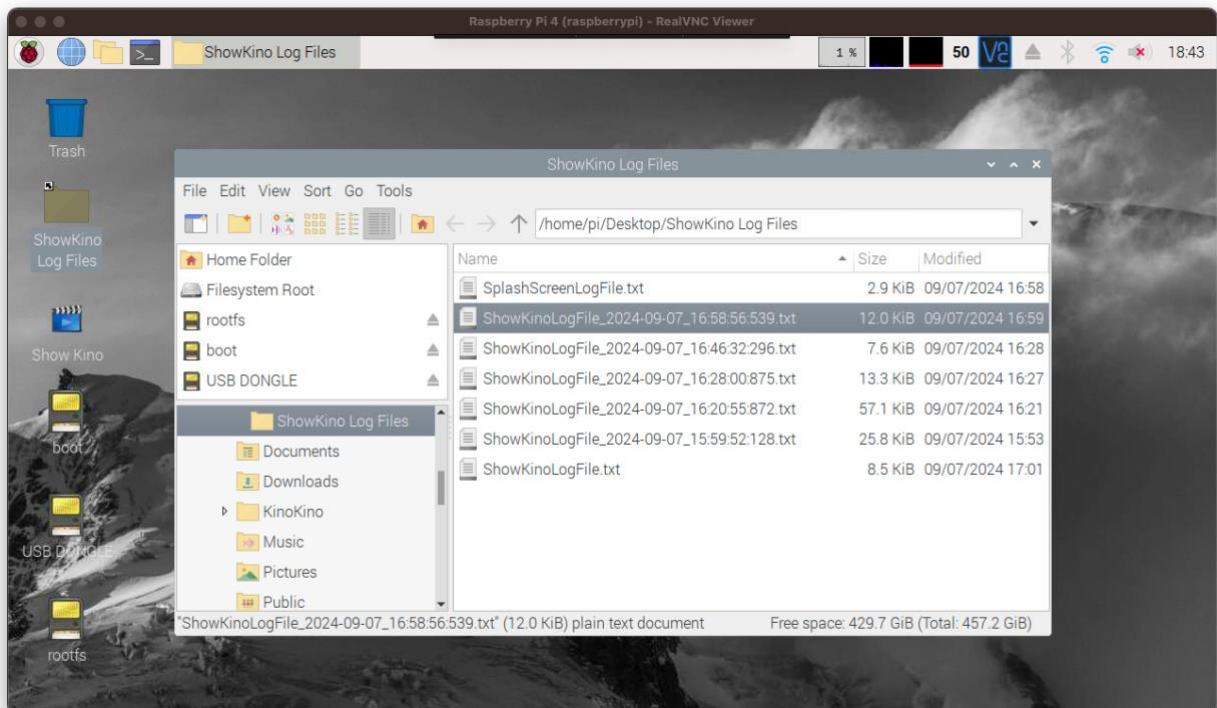
Save a log file to email a diagnostic
Quit the ShowKino application. (Press 3 times on the transport bar STOP button)

Connect an USB dongle to an USB port of the PVR (e.g. FAT 32 formatted)

Click on Cancel to close the popup dialog box
Double click on ShowKino Log Files on the desktop.

Select the log file in the list and drag and drop on the USB DONGLE on the left
Click on the eject sign of the USB DONGLE, and remove the dongle.