



Showtime VR User Manual

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Corresponding Showtime VR Controller app version:
4.15.0

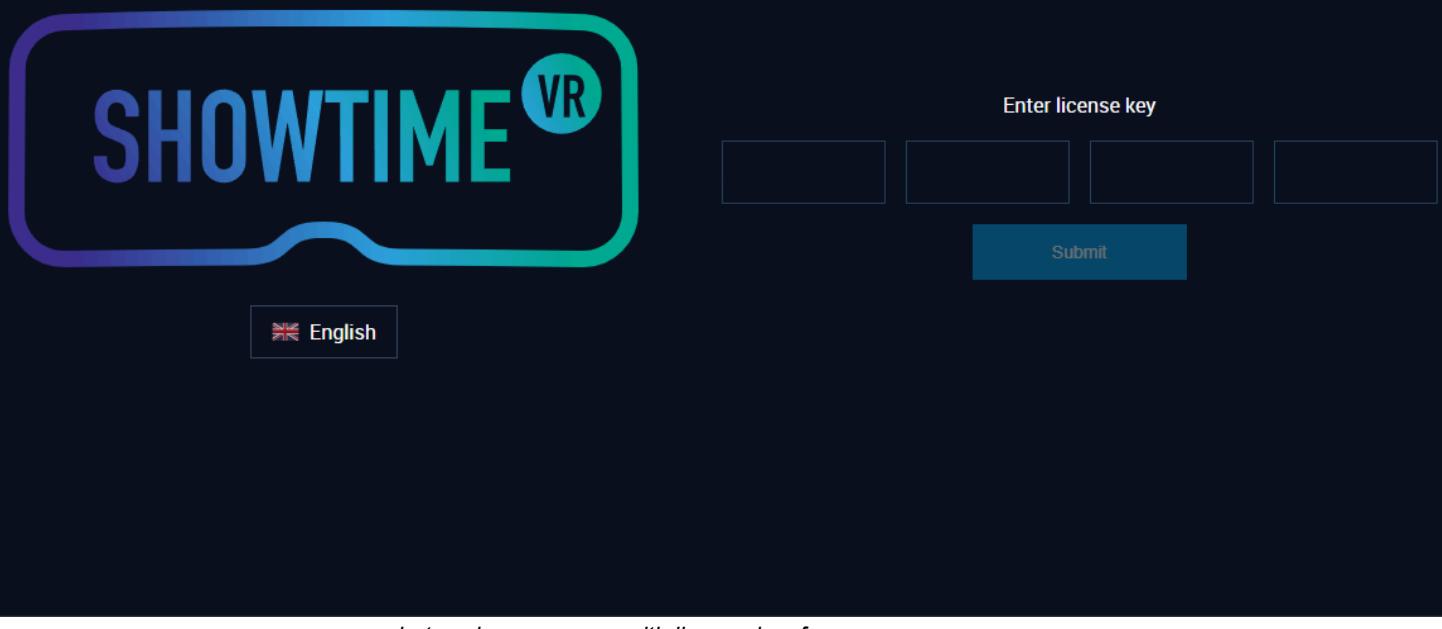
Corresponding Showtime VR Player app version:
5.4.0

Installing and registering application

1. Controller app

a. Standard, Pro, Ultra

After installing the Controller app .apk file on Android, installing the app from App Store on iOS or running the executable on PC or Mac please enter the license key and select the preferred interface language version. Make sure that the device has internet access at this point.



screenshot: welcome screen with license key form

b. Lite (Android only)

After installing the app please enter your e-mail address. You will then receive an email with additional information about Player app download links. Make sure that the device has internet access at this point.

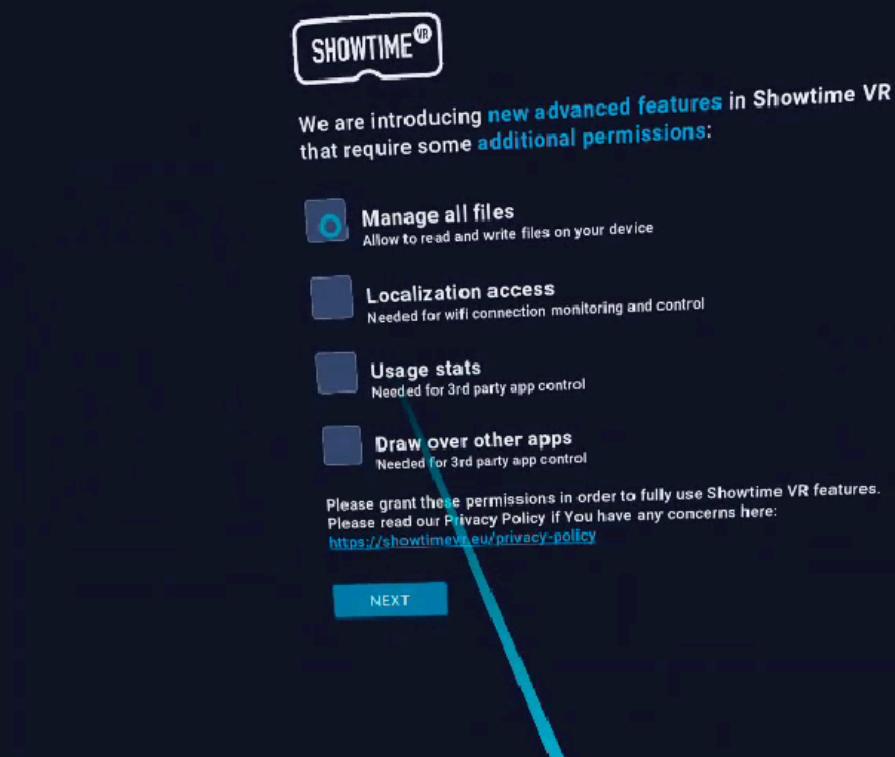
2. Player app

a. META Quest, Quest 2, Quest 3 and Quest Pro

Install the app from the Oculus Store App Labs - Search the Store for exactly "Showtime VR" or follow this link: <https://www.oculus.com/experiences/quest/5671709842842839/>

IMPORTANT! - In order to install the full version that includes advanced 3rd party app control, autostart functionality and few more features install the Player app manually with the .apk file located here: <https://showtimevr.eu/downloads>

Use any sideloading tool or ADB command with Developer Mode enabled.
This app version requires system permissions that are blocked by the Oculus Store for consumers.



screenshot: permissions screen for Player v 5.4.0 and above

b. **Pico G2 (4K), Neo2/Neo3, Pico G3, Pico 4 Enterprise**

Install the app from Pico app store or copy the apk file to your device. Open file browser, find copied file and click install.

In order to use app launching functionality on Pico G3, Pico Neo3 Pro and Pico 4 Enterprise, please **disable** the following system settings:

Settings->Developer->Business Settings:

- i. Show Popup when switching apps
- ii. Auto terminate background apps

c. **Windows**

Download the Windows player app from the URL provided here:

<https://showtimevr.eu/downloads>. Launch the Showtime VR executable.

3. Player app permissions explained

a. **Manage all files**

Headsets running Android 12 and above have the full file access blocked by default. We need this permission to read and write the /Showtime VR/ directory.

When in the “Standalone” mode of the player it is also required to read the system media directories of the device such as “Movies”, “Photos”.

b. **Localization access**

This permission allows us to control the WiFi connection and force the device to be connected to the network specified in the config.txt file

c. **Usage stats**

Thanks to this permission the controller app will know what app is currently running on the headset. This is needed for making sure the app you launched is actually working and allows us to switch between apps.

d. **Draw over other apps**

This lets us keep control over the headset when Showtime VR is in the background after launching a 3rd party app through the Controller app.

4. Installing the Player app with ADB command

a. **Using Windows PC**

- i. Put your device in the developer mode (using companion app on smartphone
- Quest, or by clicking 7 times on system version - Pico)
- ii. Download ADB:
<https://dl.google.com/android/repository/platform-tools-latest-windows.zip>
- iii. copy the player app apk file downloaded from [our website](#) to the unzipped directory (platform_tools)
- iv. Open the command line or power shell in that directory (shift + right click -> power shell)
- v. connect headset to your PC via usb cable
- vi. type in command line: adb devices
- vii. accept the popup in the headset
- viii. type: adb install name_of_the_apk_file.apk
- ix. it should show that it is installing the app and finish with a success message

b. **Using Mac**

- i. Put your device in the developer mode (using companion app on smartphone
- Quest, or by clicking 7 times on system version - Pico)
- ii. Download ADB:
<https://dl.google.com/android/repository/platform-tools-latest-darwin.zip>
- iii. copy the player app apk file downloaded from [our website](#) to the unzipped directory (platform_tools)
- iv. Open the terminal in that directory
- v. connect headset to your Mac via usb cable
- vi. type in command line: ./adb devices
- vii. accept the popup in the headset
- viii. type: ./adb install name_of_the_apk_file.apk
- ix. it should show that it is installing the app and finish with a success message

Preparing content

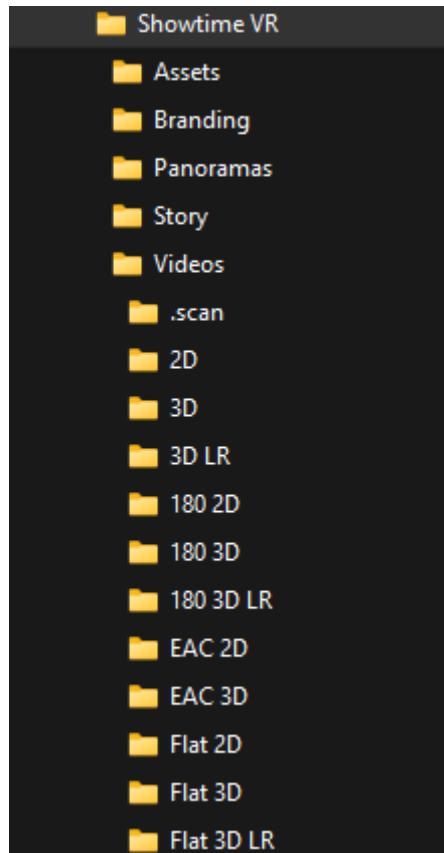
In order to put content into player device storage you need to create content directories in the **root directory** of your device or SD card. You can either launch the Player app which will

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create necessary directories on its first start or do it manually. Look below for the correct directory structure.

You can also use the **Showtime VR Library** service to easily upload content to any number of devices. Library is a part of Showtime VR Online subscription but can be also used without active subscription to this service.

If you wish to use the Library with your Showtime VR Local license, create a free trial account [here](#), cancel the subscription and only pay for the downloaded data transfer as you go.



Directory naming guide for videos:

2D - spherical monoscopic 360
3D - spherical stereoscopic top-bottom 360
3D LR - spherical stereoscopic left-right 360
180 2D - spherical monoscopic 180
180 3D - spherical stereoscopic top-bottom 180
180 3D LR - spherical stereoscopic left-right 180
EAC 2D - cubemap monoscopic 360
EAC 3D - cubemap stereoscopic left-right 360
Flat 2D - regular flat videos
Flat 3D - flat stereoscopic top-bottom
Flat 3D LR - flat stereoscopic left-right

Detailed information about the supported formats is located at the bottom of this document.

Naming and branding VR headsets

The **config.txt** file located in the Showtime VR directory of the player device will let you customize the appearance of the device in the controller interface and also enable certain additional features.

Available variables:

“nr = [int]” - number of the device displayed in the controller interface

“name = [string]” - short description of the device, preferably not more than 20 characters

“logo = [string]” - relative path to the 2D rectangle logo file which will be displayed in the player app lobby. Supported file formats: jpg, png (with alpha channel). Dimensions: preferably 2048x1024px. Set by default as “Branding/logo”. Only licenses with the Branding option enabled will use this.

“skybox = [string]” - relative path to the 360 background file which will be displayed in the player app lobby (image or video). Supported file formats: jpg, png, mp4 or a playlist (paths separated with semicolon). Dimensions: preferably 4096x2048px or higher, 2:1 aspect ratio. Set by default as “Branding/skybox”. Only licenses with the Branding option enabled will use this.

Examples:

skybox = Branding/mybackground.jpg

skybox = Branding/video.mp4;Branding/video2.mp4;Branding/video3.mp4

skybox = **passthrough** - will display passthrough view instead of skybox on devices that support this

“preferredUIMode = [string]” (None/Standalone/Simple/Advanced) - interface mode of the Player app, configured upon the launch of the player and saved in the config file

None - Mode selection on every app start

Standalone - Mode for working without the controller app. All media files will be listed with thumbnails. Media playback controls will be available for the user.

Simple - Standard working mode of the Player app without any interface beside the controller connection status, best for the Local version of Showtime VR.

Advanced - full interface with Show connection panel, library connection status and file download state. This mode has to be used for working with Showtime VR Online.

“flatScreenSize = [int]” (default 100) - size of the screen for flat videos playback.

“wifiID = [string]” - SSID for the WiFi network. (app version 4.14.0 and above)

“wifiPW = [string]” - password for the WiFi network. (app version 4.14.0 and above)

“autostart = [bool]” - autostart of the Showtime VR Player app on device startup. (app version 4.14.0 and above)

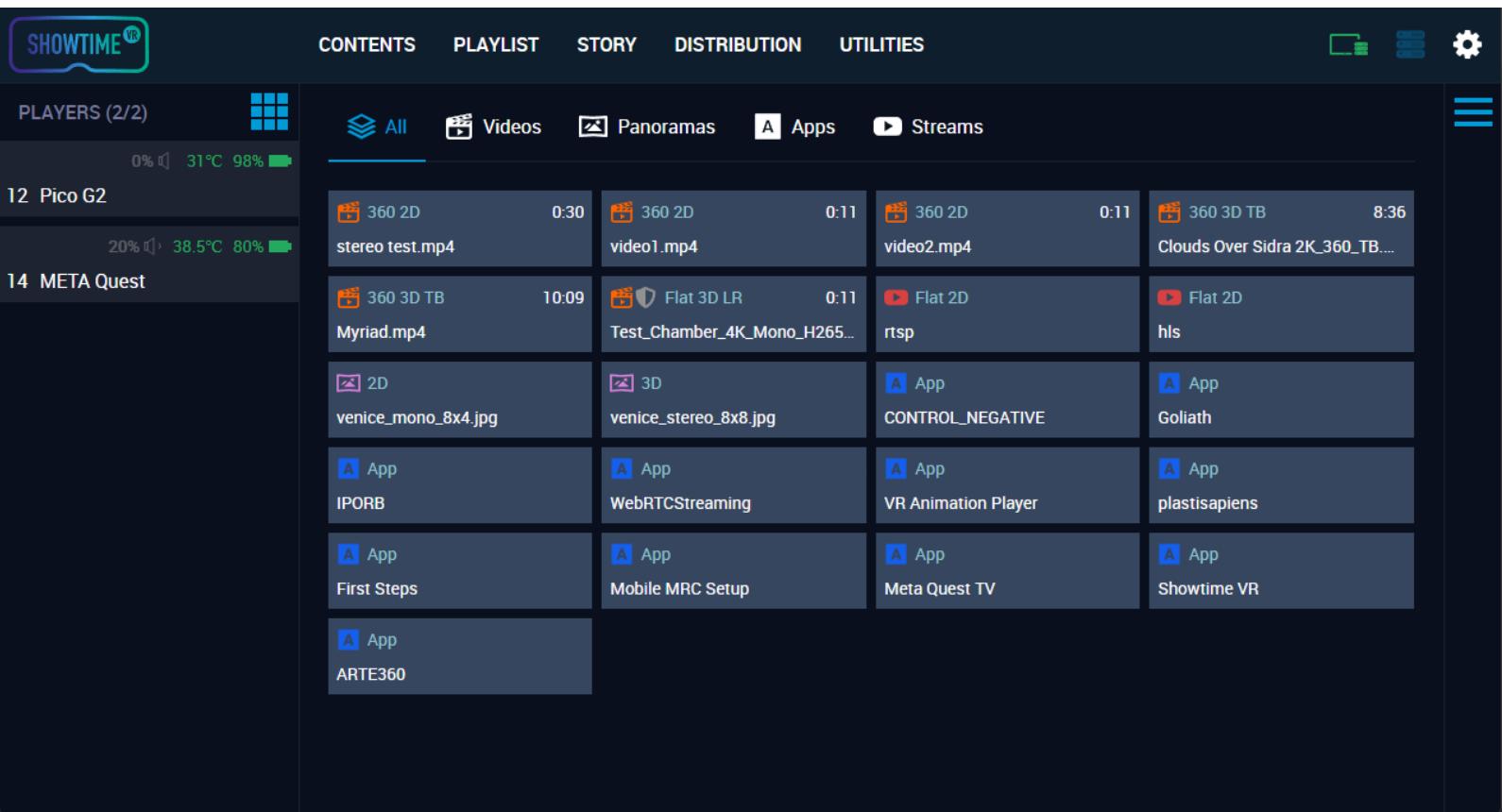
“playerForce = [bool]” - when true the App will prevent the user from leaving the app even if the Home button was pressed, it will always return to the Showtime VR app.

Make sure that you save the config.txt file in the UTF-8 character set.

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Connecting player devices to Controller app with Showtime VR Local

Make sure that the controller device and player devices are in the same WiFi network. You can use an external WiFi Access Point or a mobile Hotspot configured on your controller device. After connecting to WiFi, launch the Showtime VR Controller app. Launch Showtime VR player apps in your headsets. After the player app launches it will show connection status on the headset's screen. Once the connection status shows 'Connected' the player devices will be visible on the left side of the controller's app interface.

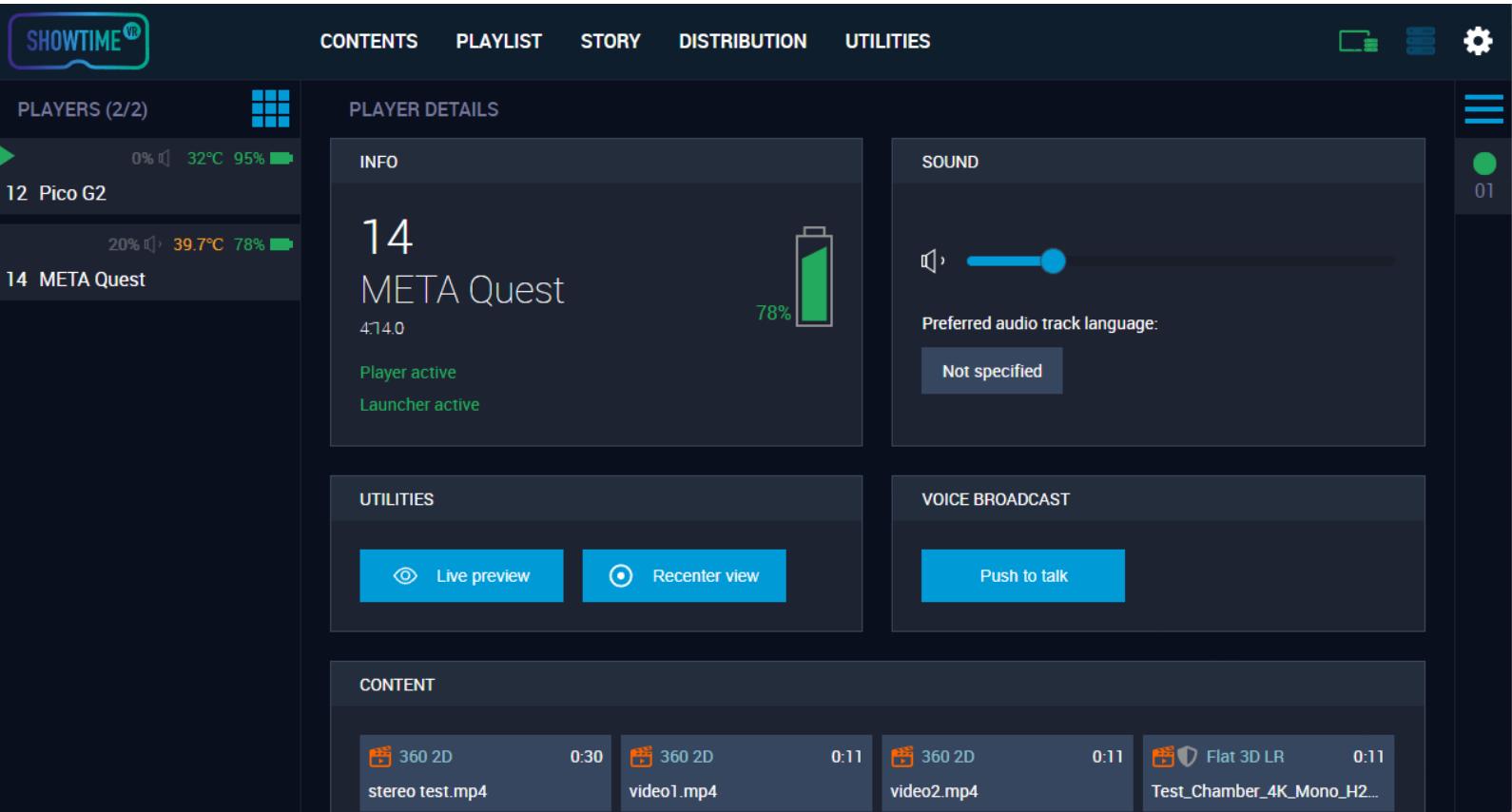


screenshot: controller app player devices and contents view

Controller interface

1. Player devices

Choosing a player device will open a player device details screen. It contains the player device name and number (set in the config.txt file), player app version installed on the player device, current volume level adjustment bar (depending on license version), option to select preferred audio tracks for this device (if multitrack content is available), button for direct voice broadcast (to only this device), media library contents of that device and the current playback information (if applicable) and the Launcher service status (app version 4.14.0 and above).



screenshot: player device details

2. Media contents

Under the Contents tab (depending on the license version) you will see the list of media available for playback stored in the connected player devices - videos, 360 panoramas, installed apps and online videos/streams.

a. Videos

This tab will filter all videos stored in the headset's /Showtime VR/Videos/... subdirectories.

b. Panoramas

This tab will filter all Images stored in the headset's /Showtime VR/Panoramas/...

subdirectories.

c. **Apps (Ultra)**

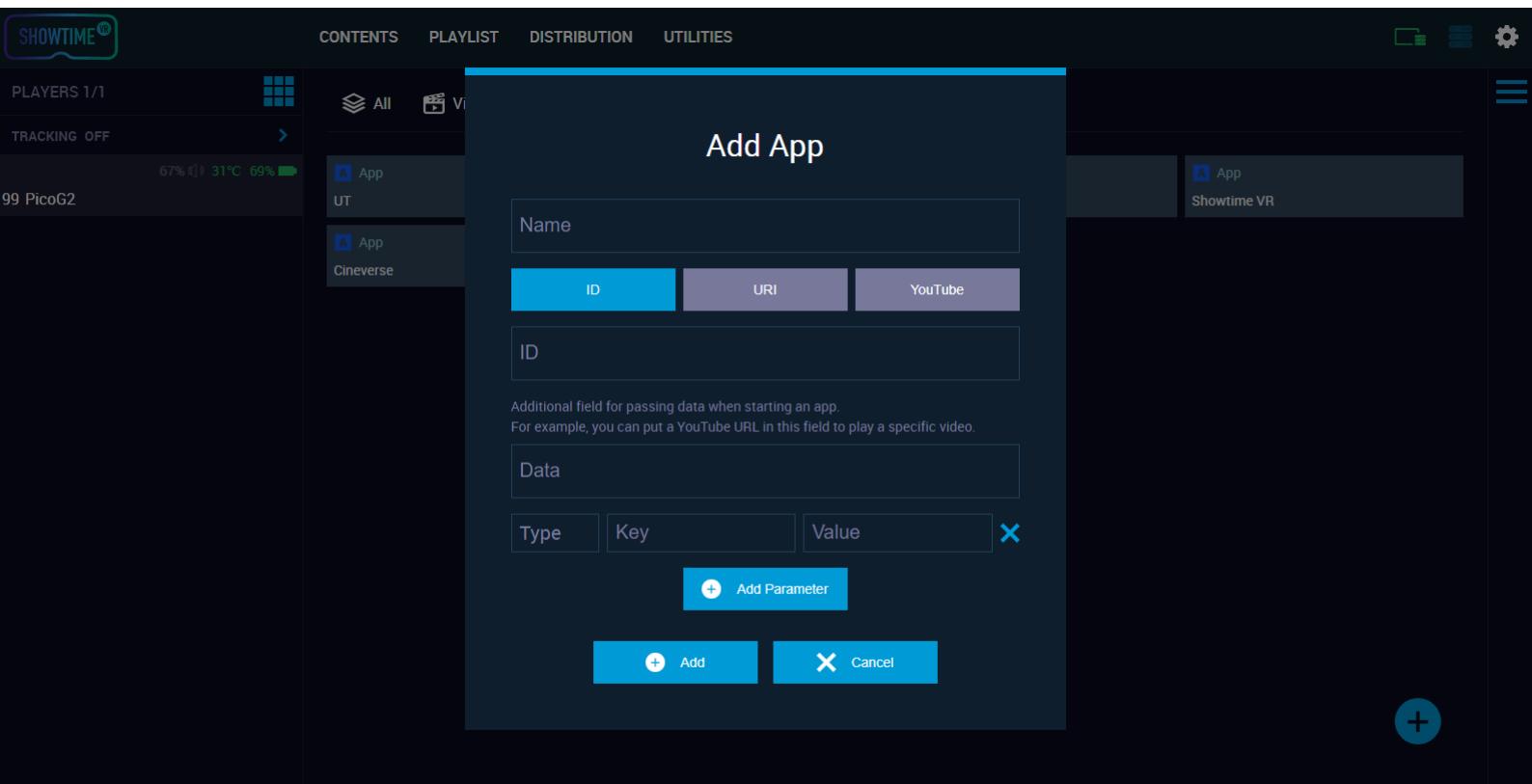
This tab will display all apps that are installed on the headsets and are possible to launch.

You can also add an app to the list manually if you wish to specify some additional launch parameters or launch a specific Youtube video.

In order to add an app click the ‘plus button’ and type in the app label/name and its **android app id**. App id is **case sensitive!** You can check the app id if you click on any of the automatically listed installed apps. To add launch parameters click “Add parameter”, choose its type and provide the key and value.

To add and launch Youtube video, select the Youtube tab, add name and then paste the video URL.

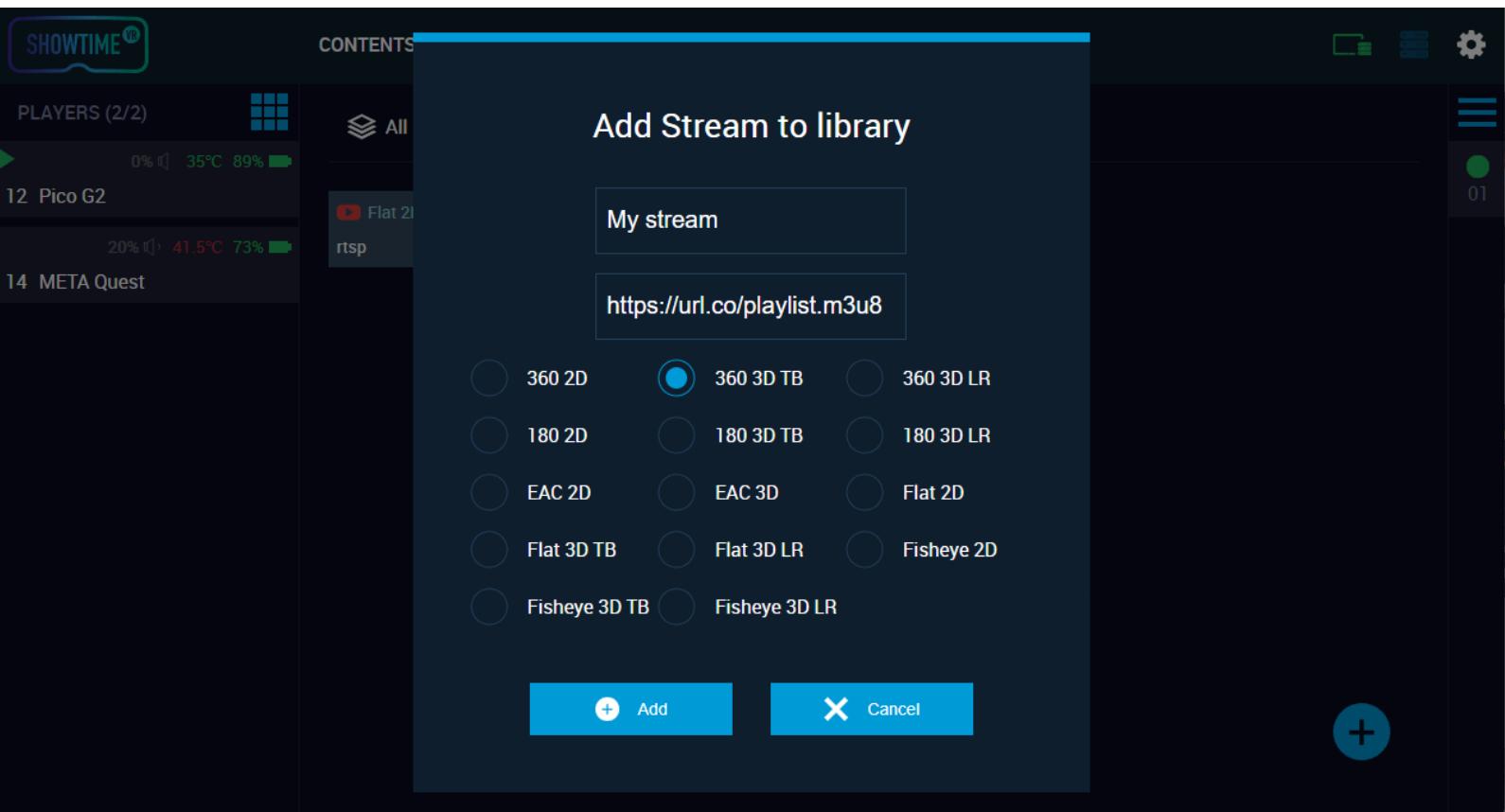
You can also launch a specific app installed in the headset that supports URI links. Select the URI tab and specify desired URI below.



screenshot: add external app

d. **Streams (Pro)**

This tab will show and let you add video streams or files from online sources. In order to add a stream or video source simply enter its name, URL and specify its frame format. The user needs to secure adequate internet bandwidth for streaming to the VR headsets.



screenshot: add stream

3. Playbacks

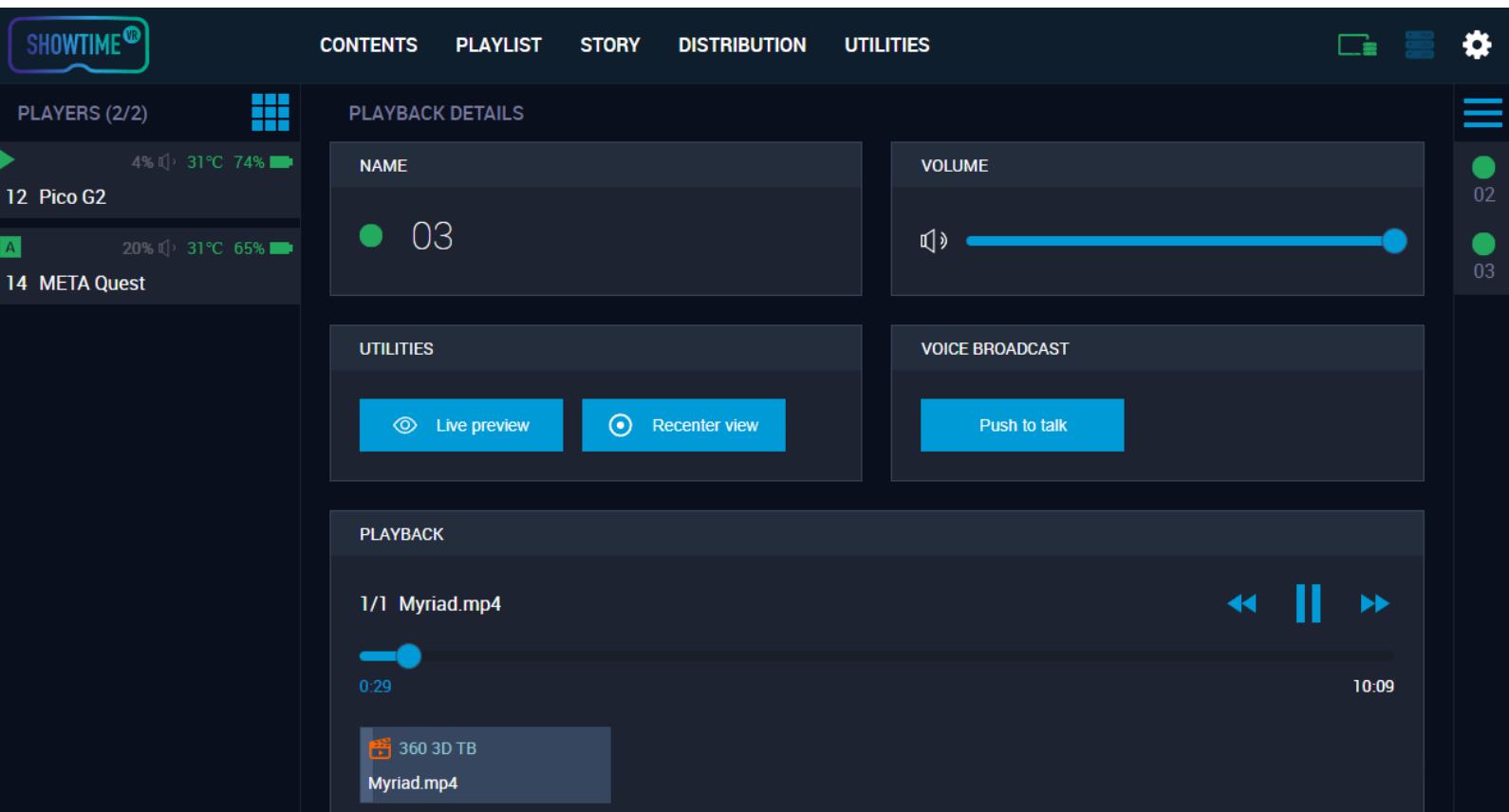
Once you click on a video or other content you will be able to start the playback. Choose on which devices you want the playback to start. For videos you can also select a loop option to “loop” the playback or select “auto join” to start a global playback. All available devices will automatically join this playback, also any devices that come active while this playback still exists will also join the synchronized show.

The Kiosk mode checkbox will make the player device play selected content in loop and restart it every time this device gets idle/active.

After starting a playback you will be moved to the playback details screen. You can also enter this screen by clicking on any current playback icon located in the right side of the interface under the playbacks tab, or by clicking the “Go to playback” button from the player device details screen.

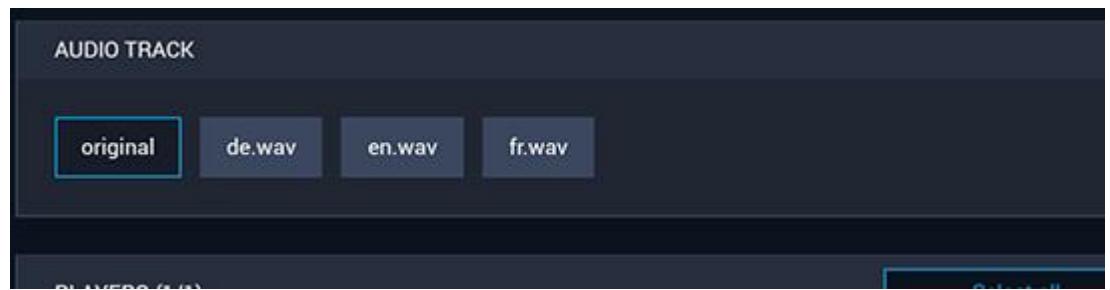
This screen shows the currently selected playback name, volume bar for whole playback (after playback starts it shows maximum level which is not representing the actual volume of each device taking part in the playback. You can use this volume bar to set the volume level on all devices at the same time.), currently playing media with progress bar and playback controls and buttons for canceling playback, and launching live preview.

When launching apps the progress bar does not represent the actual progress in the app but rather the time spent in the app.



screenshot: playback details

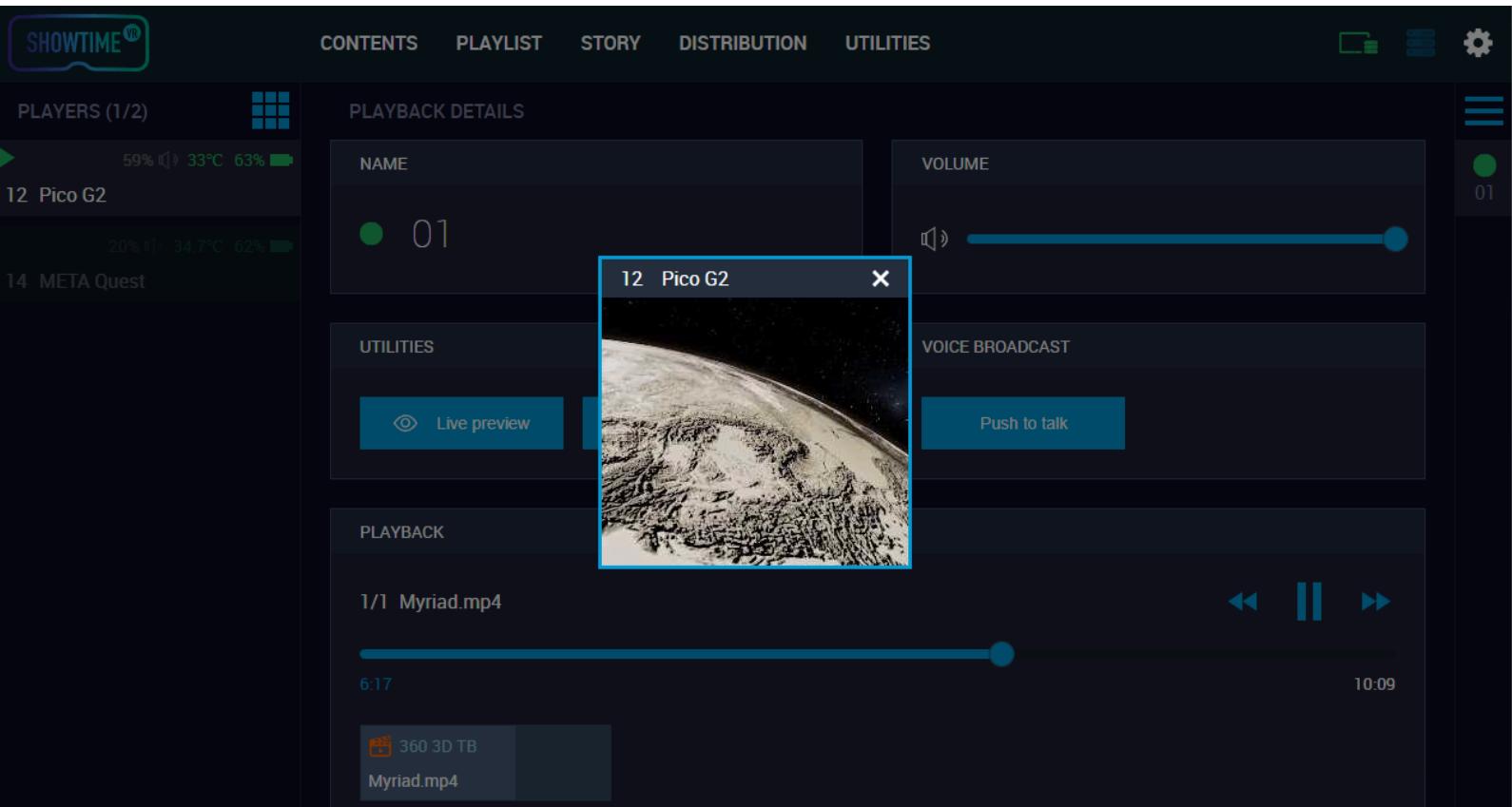
a. **Audio tracks (Ultra)**



If you wish to use multiple audio tracks for your video, for instance different language versions you can prepare additional files with sound in .wav or .tbe format. The new audio track files should have the same name as the video and an additional suffix, for example if your video file is video.mp4 you can add an audio track named video_en.wav. All tracks prepared like that will then be visible and selectable from the playback start screen.

b. **Live preview (Ultra)**

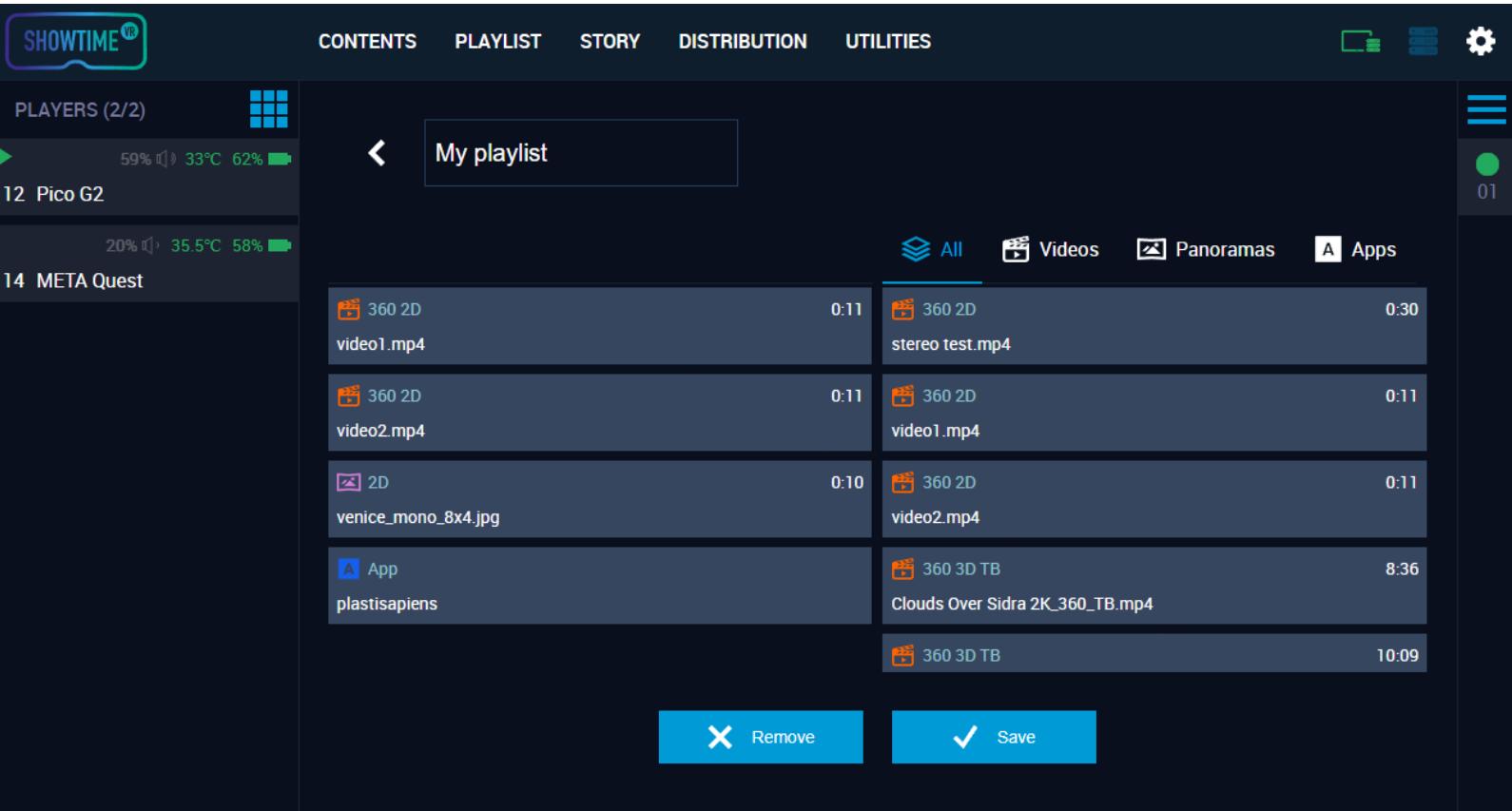
This option gives you direct live feed (with exact POV) from the chosen player device. By clicking the live preview on the playback screen you will get the view from the random player device. In order to see a specific one go to the player device screen of your choice and use a live preview button there. Live preview is available only for videos and panoramas.



screenshot: live preview

4. Playlists (Pro)

This tab will let you create playback playlists of chosen media. You can use both videos and panoramas. Create a playlist by clicking the “plus” button. Enter its name and click on the media on the right side list in order to add them to the playlist. You can use the list filters to switch between videos and panoramas. Once you are ready click “save” to save your playlist.



screenshot: playlist creation screen

When your playlist is ready you can click “play” from the playlist list screen to choose the player devices you want it to play on.

5. Tracking (Ultra)

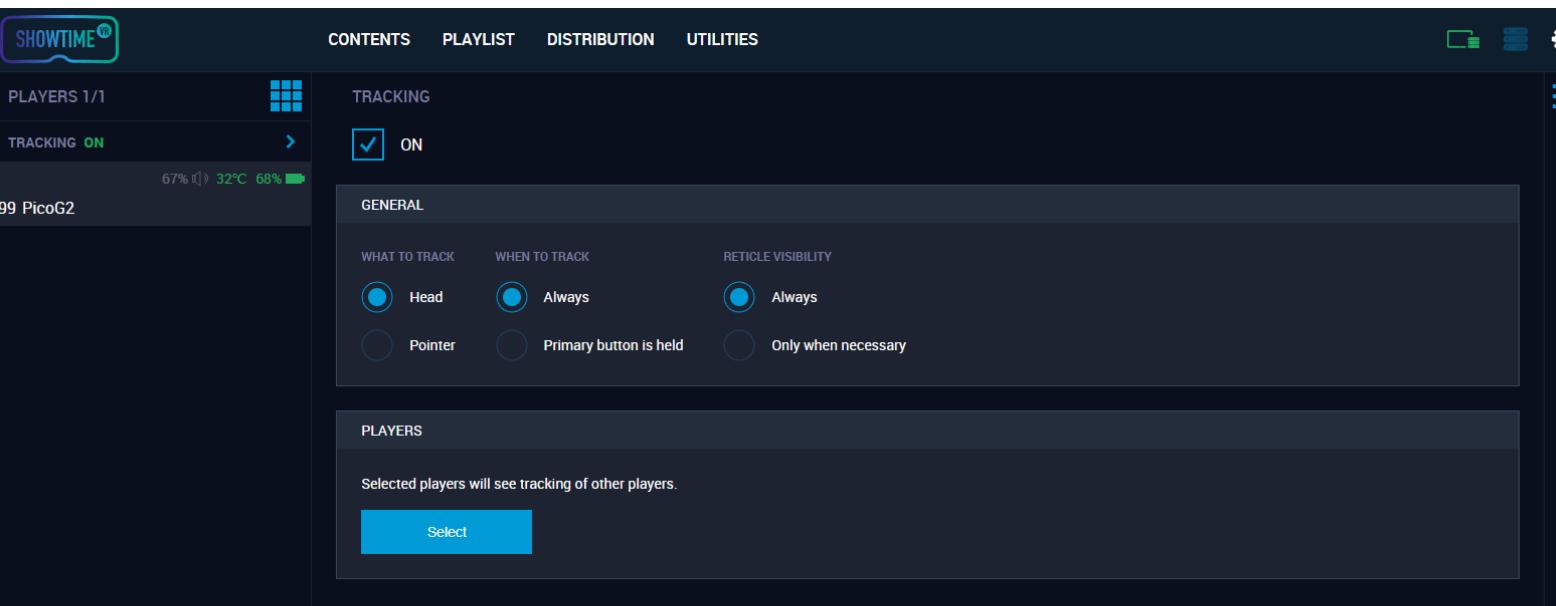
Allows the visualization of other users' POV. When enabled, a selected player device can display indicators showing where other players are looking (if head tracking is enabled) or targeting with their pointers (if this is tracked). This overlay can be displayed either in the headset or on the Windows version of the player.

What to track - select either head or pointer if user will hold the bluetooth controller in their hands

When to track - always or only when a button on the hand controller or on the headset is pushed

Reticle visibility - always or only when necessary, which means that the reticle will be displayed in the tracked players view from their view only when button is pressed if that option was selected in previous step

Select the devices that will see the tracking data. Depending on your goal you can select one, for example teachers' device (headset or PC player) or all devices to share the information on where everyone is looking.



screenshot: tracking screen

6. Utilities (Ultra)

- a. Recenter headsets FOV
- b. Clear default audio tracks for player devices (if they were set)
- c. Broadcast voice communication to all active played devices
- d. Disable app forcing (for the player itself - if specified in the config file and also for launched apps)
- e. Notification - send text notification to all headsets' screens

7. SVR server status

The two icons located in the right upper corner of the interface indicate the Showtime VR communication server status. If the first icon (tablet like) is green, that indicates that your

device running the Controller app is also acting as the communication server. If you are using the Ultra license and using another controller app in this network the second icon might lighten up. This will indicate that another controller is acting as a server for this setup.



screenshot: server status icons

If both icons are in gray something went terribly wrong - please contact us! :)

8. Settings

Click the settings icon located in the top right corner of the interface. On this screen you can see your license key, you can remove the controller registration by clicking remove registration and enter a new one or use your key on another device.

Share key is used in the Library to authorize encrypted DRM content. Use this key to allow playback of specific encrypted videos with this Showtime VR license. You can safely share this key with 3rd party users who want to share their content with you.

You can also change the **theme** of the interface to light and change the interface language version.

The **volume** limit box lets you block accidental setting of volume to higher than chosen limit when using the slider bar on playback and player screens.

Auto volume option makes every new connected headsets set this value.

The **statistics** window (in Ultra license) is used to send gathered playback statistics to our server for further analysis by you in our web platform. (user account creation is required). You can also set the stats to be sent automatically.

Server tab allows to limit the use of multiple controllers in the same network. Ultra license allows controller headsets with multiple controllers and share the data between them. You can disable/enable this here.

Enable launcher module setting by default allows you to launch 3rd party apps and stay connected to the devices. Disabling this will improve network traffic for low end wifi networks. Consider disabling this if you do not use the launcher functions.

Content Technical Specification (recommended)

Video 360 (spherical, EAC), 180 (spherical):

Codecs H264, H265, VP9

Containers mp4

Bitrate max 100Mbs (depending on the device)

Frame rate max 60fps

Frame size max 8192x4096px for mono or 5760x5760 for stereo on devices supporting this (Quest2, Pico Neo3 Pro, Pico G3, Pico 4 Enterprise). 4096x4096 on lower specced devices.

The performance may vary depending on your hardware.

Audio:

Stereo 44,1Khz 48Khz encapsulated

FB360 3D Spatial TBE sound support (<https://facebook360.fb.com/spatial-workstation/>)

.tbe file should have the same file name as corresponding video file

Ambisonics B-format (Ambix) integrated into mp4 file

Panoramas:

Format JPG, PNG

Size up to 8192x8192 px

3D One file Top-Bottom

Stream:

HLS, DASH, SmoothStream.

Subtitles:

SRT files UTF-8 encoding (<https://matroska.org/technical/specs/subtitles/srt.html>)

.srt file should have the same file name as corresponding video file