

Manual for the molitor Media Player 4K Light

Manual Version 01.01

Firmware Version 1.0.41

molitor

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If you find information in this manual that is incorrect, misleading, or incomplete, we would appreciate your comments and suggestions.

1 TECHNICAL DATA

1.1 SUPPORTED FILE FORMATS

1.1.1 Video

Video Formats	
H.265/HEVC: Main Profile and Main 10 Profile	1920 x 1080 @60p 4K x 2K@60p*
AVC (H.264/MPEG-4 Part 10) with MVC support	1920 x 1080 @60p 4K x 2K@30p*
MPEG-2	1920 x 1080 @60p
VC-1	1920 x 1080 @60p
MPEG-4 ASP@L5	1080p60
WMV	1080p60

*Bei Erwerb einer optionalen 4K-Dekoderlizenz

Video Container	.mov, .mp4, .mkv, .wmv, .mpg/.mpeg, .avi, .iso
-----------------	--

1.1.2 Images

Picture Formats	
JPG	Maximale Auflösung 10k x 10k Pixel
PNG	Maximale Auflösung 10k x 10k Pixel
BMP	Maximale Auflösung 10k x 10k Pixel
GIF	Maximale Auflösung 10k x 10k Pixel
TIF	Maximale Auflösung 10k x 10k Pixel

1.1.3 Audio

Audio Formats	
AAC	32kHz, 44.1kHz, 48kHz
MP3	32kHz, 44.1kHz, 48kHz
WAV	32kHz, 44.1kHz, 48kHz
FLAC	32kHz, 44.1kHz, 48kHz

1.1.4 Data Storage

Data Storage	File System
MicroSD Karte	FAT32 NTFS exFAT
USB	FAT32 NTFS exFAT

1.1.5 Connections

Connections	
MicroSD Karte	1 x Front: MicroSD
USB	1 x USB 3.0 1 x USB 2.0
Video Ausgang	HDMI 2.0 CVBS über 3,5 mm Klinke
Audio Ausgang	SPDIF Optisch Stereo über 3,5 mm Klinke
Netzwerk	RJ45 Gigabit WLAN Intern
RS232 Seriell	Über USB-zu-DSUB9 Adapter

1.1.6 Technical Details

Technical Details	
Length x Width x Height	115 mm x 105 mm x 20 mm
Weight	225 g, Alu-Gehäuse
Power	5V
Power Consumption	ca. 5W im Betrieb mit SD Karte
Temperature Range	-10 to +40 °C

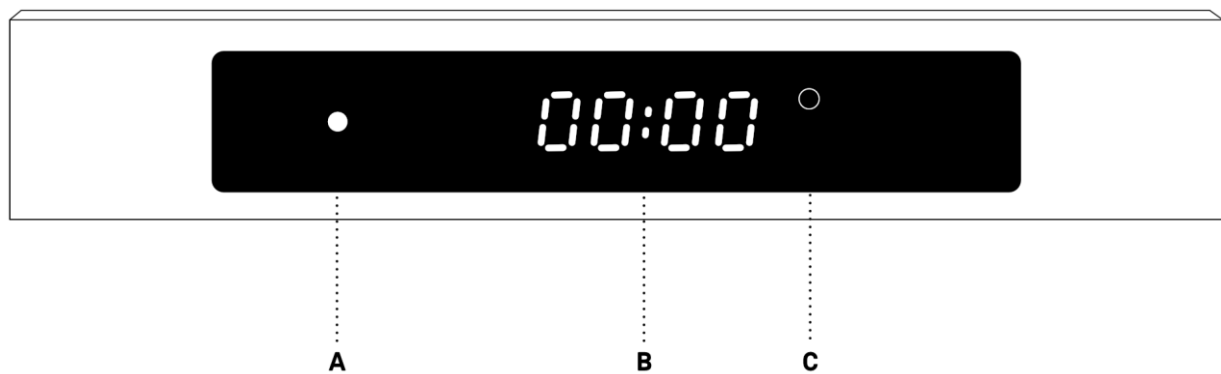
1.1.7 Scope of Delivery

Scope of Delivery

CF Player®Light
Power Adaptor 5V / 2A
WLAN Antenne 10 cm
Manual on SD Card
IR-Fernbedienung zur Einstellung

2 HARDWARE OVERVIEW

2.1 FRONT

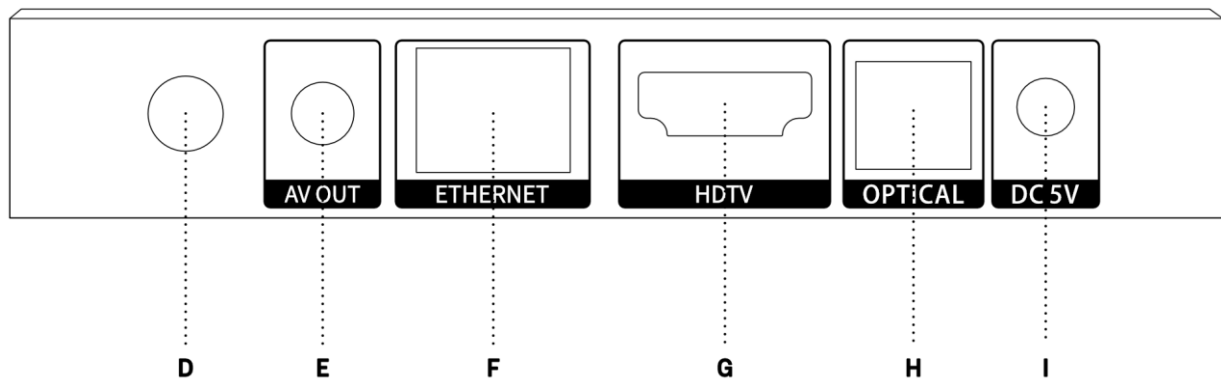


A System-LED

B Time

C Various Symbols (Network, USB-Device, Playback Status)

2.2 BACK



D Wireless Antenna Connection (10cm Antenna included in Delivery)

E AV Output 3.5mm Mini-Jack 4-Pole (CVBS und Stereo Audio)

F Gigabit LAN-Port

G HDMI2.0 Output

H S/PDIF Optical Audio Output

I Power Adaptor (5V)

2.2.1 Wireless Antenna Connection

For an improved Wifi reception, screw in the included 10cm Antenna here.

2.2.2 AV Output 4-Pole Mini-Jack

4-Pole 3.5mm Mini-Jack connection.

1. Ground
2. CVBS
3. Audio Right
4. Audio Left

2.2.3 Gigabit LAN Port

Integrate the Media Player 4K Light into an existing network or build up your own network of Media Players 4K Light.

It can either be integrated via DHCP or be assigned a fixed IP address. For details please refer to the Network Settings section.

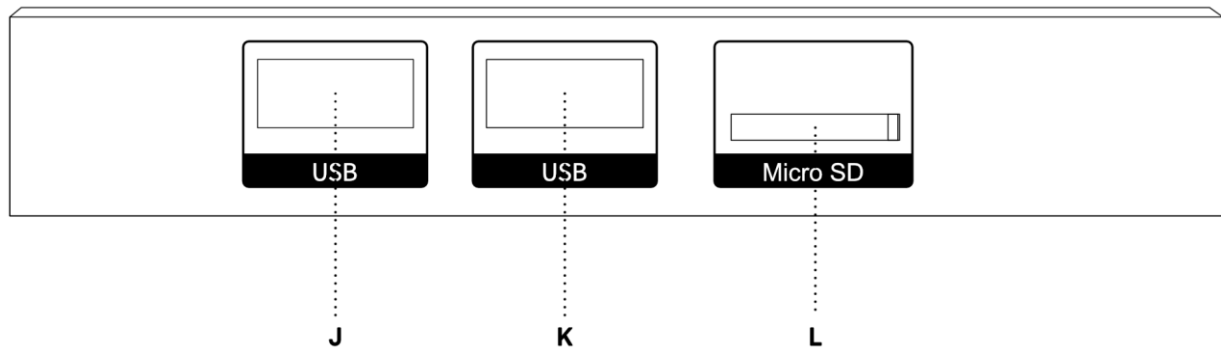
2.2.1 SPDIF Optical

Digital Audio output. Connect an optical TOSLINK cable to transmit the audio signal to your end device.

2.2.2 Power Adaptor Connection

Connect the provided 5V power adapter to this port.

2.3 RIGHT SIDE



J USB 3.0

K USB 2.0

L MicroSD

2.3.1 USB 3.0

USB 3.0 Port for the connection of external devices such as: Mouse, Keyboard, Presenter, Touchscreens, etc...

2.3.2 USB 2.0

USB 2.0 Port for the connection of external devices such as: Mouse, Keyboard, Presenter, Touchscreens, etc...

2.3.3 MicroSD

Insert your MicroSD card with your playback content here.
Supported data formats: FAT32, NTFS, exFAT

3 FIRST STEPS

3.1 SETUP

Remove the Media Player 4K Light from the packaging.

3.2 CONNECTING OUTPUTS

3.2.1 Video

Connect the Media Player 4K Light to your display or projector using the HDMI2.0b port on the rear of the device.

By default, the Media Player 4K Light will choose a suitable resolution automatically. In some cases, the display can send the incorrect information and the signal will not be best possible option. You can then configure the player individually. You can read more in chapter 4.2.2. Display Setup

If no storage device with playable files is plugged in, the start page with version info is displayed. Otherwise, it will play directly from MicroSD card or USB memory.

3.2.2 Audio

You can connect audio via 3 separate outputs:

1. Digital audio via the HDMI output on the back.
2. Digital audio via the SPDIF optical output on the back.
3. Analog audio via the 4-Pole Mini-Jack AV output on the back.

All audio outputs are active simultaneously and so you do not need to change any settings.

3.3 NETWORK

In order to use the network functions of the Media Player 4K Light, you must connect it to a network. The following features are only usable if the Media Player 4K Light is connected to your local network:

- Display of external HTML Websites
- UDP Control
- Set time and date via NTP server

Please follow these steps to connect the Media Player 4K Light to your local network:

- I. Connect a CAT5 Ethernet cable to the Gigabit LAN Port on the back.

- II. IP Address:

By default, DHCP is activated. If you have a DHCP Server in your network, you do not need to configure anything. The obtained IP can be seen on the display, if neither SD Card nor USB storage is present.

To assign a static IP address, you can either do it via the settings screen on the display or the CFPSetup.txt file.

- a. On the Player:

Press the Setup button on the included remote control.

Use the selection arrows and the OK button to select Network & Internet

There you can either activate and configure the Wifi or update the settings for a wired network.

- b. With CFPSetup.txt:

Create a text file called "CFPSetup.txt" or edit the one provided on the SD Card. Set DHCP to Off, or any IP setup will be ignored. Follow this syntax:

DHCP Off
IP 192.168.0.2
Subnet 255.255.255.0
Gateway 192.168.0.2

Save this file on the SD Card or USB storage and insert it into the Media Player 4K Light. The new setting will be applied instantly.

3.4 STARTING THE MEDIA PLAYER 4K LIGHT

Connect the 5V power supply to the power socket on the rear of the Media Player 4K Light. Then connect the power supply to the mains (220V). The Power LED on the front will change from orange to red and you will see a boot screen on the display. As soon as the Media Player 4K Light starts playback, the LED will change to green and your content or the setup screen will appear on the display.

3.5 PLAYBACK FILES

Copy your media files to the root directory of the SD Card or USB storage.

Playback will start in alphanumerical order. After the last file has ended, playback will continue with the first item.

If you want to change the playback order, you can create a Playlist. You can find details on how to do this in section 5.2

4 CONFIGURATION OF THE MEDIA PLAYER 4K LIGHT

There are two ways to configure the Media Player 4K Light:

1. Via the Remote Control
2. Via the Setiup file CFPSetup.txt

4.1 THE REMOTE CONTROL

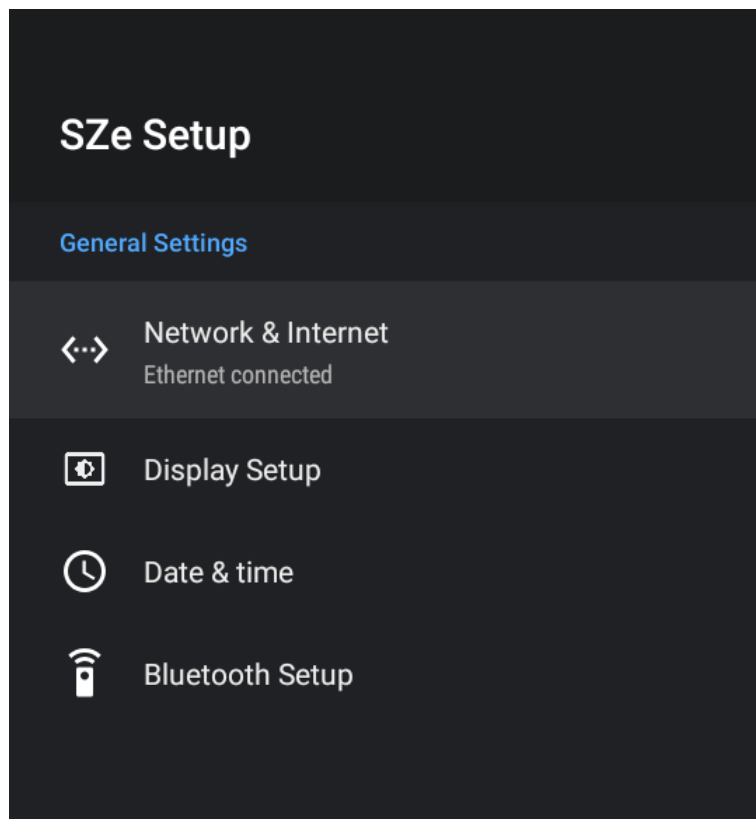


- A Mute Activation / Deactivation
- B Show Setup Menu
- C Selection Arrows and OK Button
- D Mouse Pointer On / Off. The mouse pointer can be moved with the selection arrows and confirmed with the OK Button.

- E Volume Adjustment
- F Back Button in Menu
- G Display Mode adjustment. Switch between Portrait und Landscape.
- H Direct selection of ITEMS via Index number.

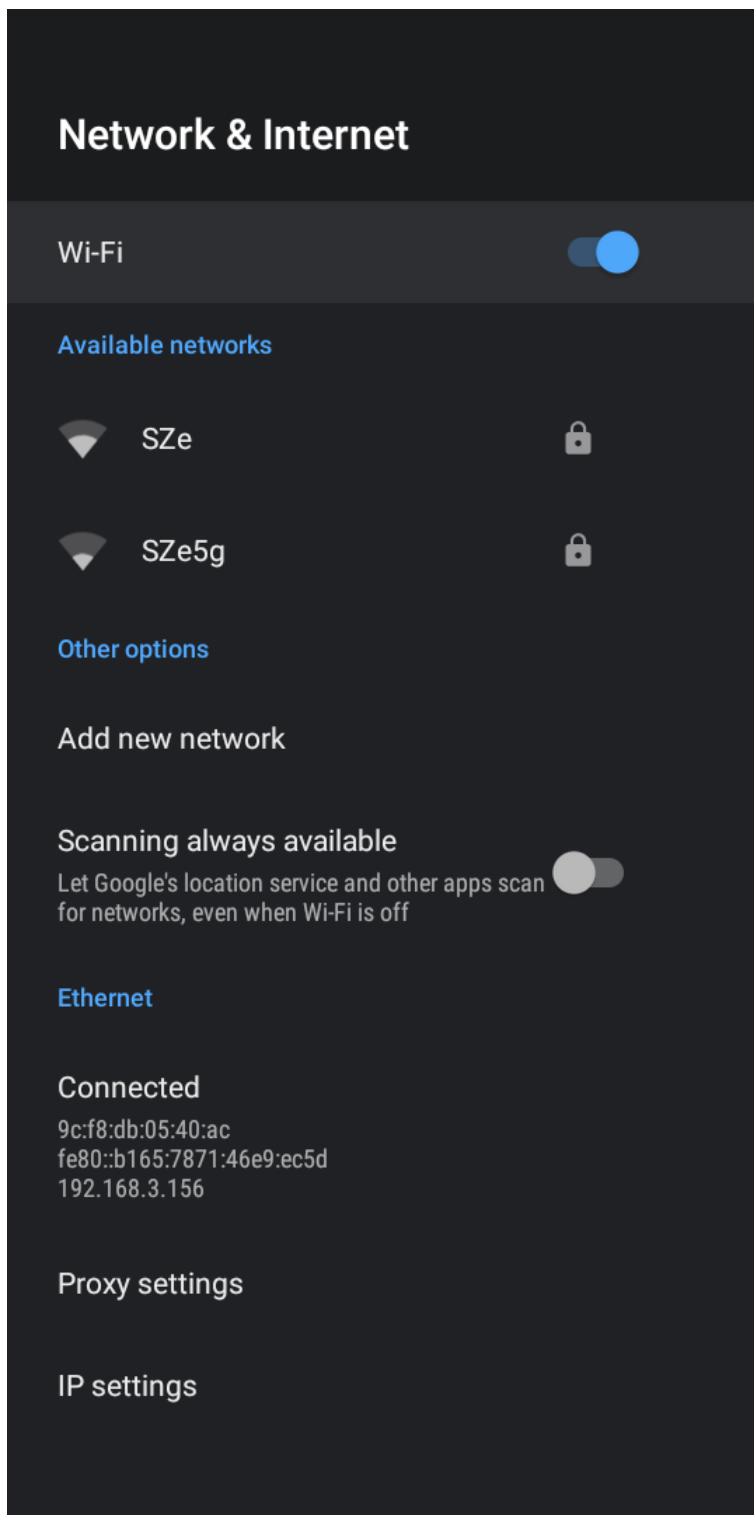
4.2 OSD MENU

When you press the Setup button on the remote control, the Setup menu will open on the right side of the display.



4.2.1 Network & Internet

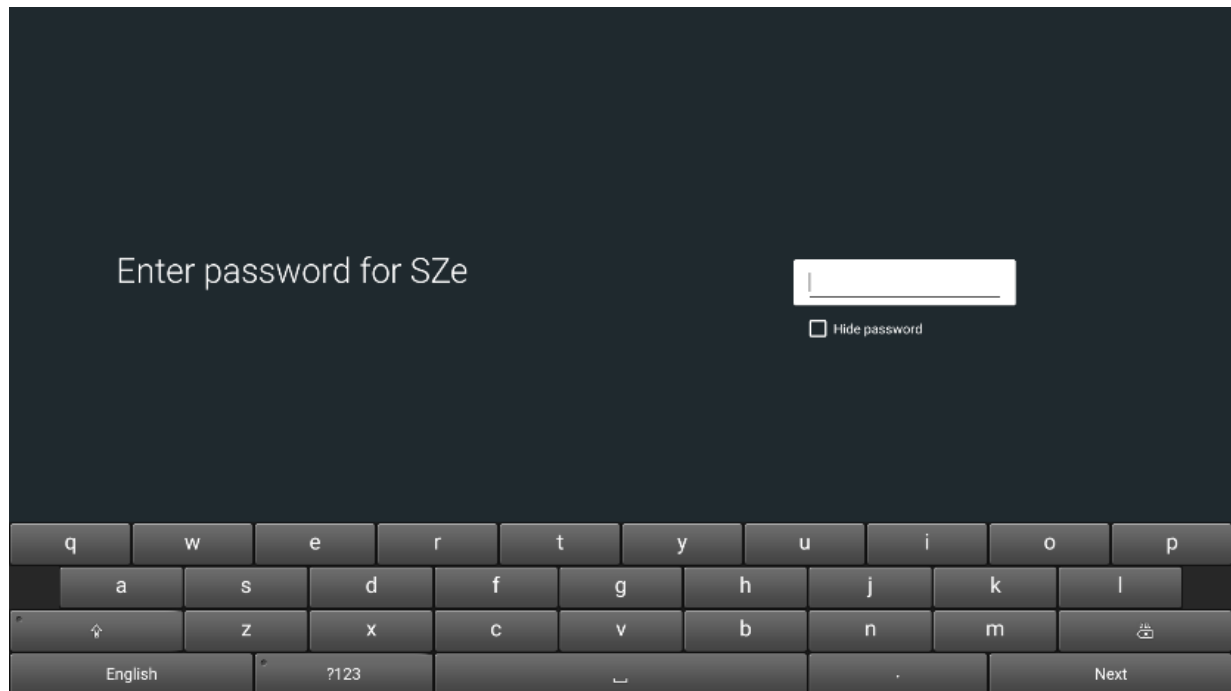
You can update network settings here.



4.2.1.1 Wi-Fi and Available networks

When Wi-Fi is activated, you can choose from available wireless networks and enter the network

password:



Input is possible either via a connected USB Keyboard, or with the Remote Control/Touch/USB Mouse via the onscreen keyboard. Press the back button on the remote control to close the keyboard and navigate the text field.

Important Notes

Wi-Fi will **only** function when there is **no** LAN cable connected.

4.2.1.1 Wi-Fi IP and Details

If you are connected to a Wi-Fi network, you can select it and press OK to switch to the Wi-Fi network details. There you can change proxy settings, as well as IP Addresses/Gateway/Subnet/DNS information.

SZe

Internet connection

Connected

IP address

192.168.3.106

MAC address

94:e0:d6:af:60:3d

Signal strength

Fair

Proxy settings

None

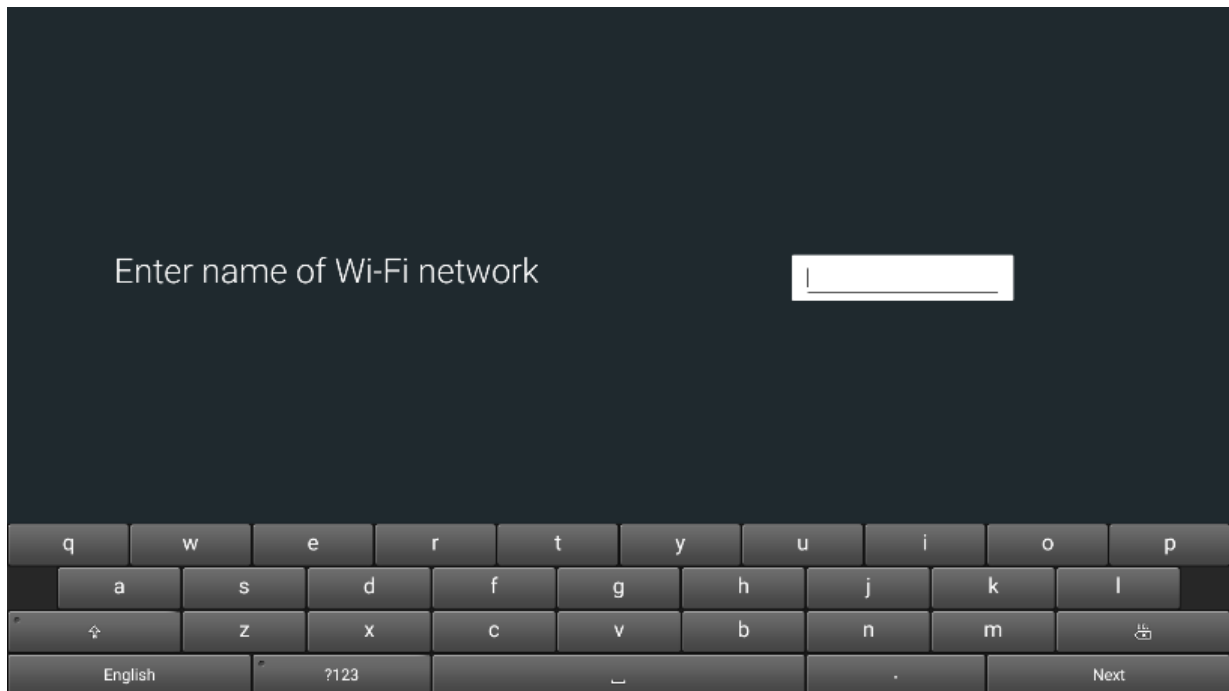
IP settings

DHCP

Forget network

4.2.1.2 Add new network

You can manually input a Wi-Fi SSID Name in case it is not publicly visible.



Input is possible either via a connected USB Keyboard, or with the Remote Control/Touch/USB Mouse via the onscreen keyboard. Press the back button on the remote control to close the keyboard and navigate the text field.

4.2.1.3 Scanning always available

This feature is not available for the Media Player 4K Light

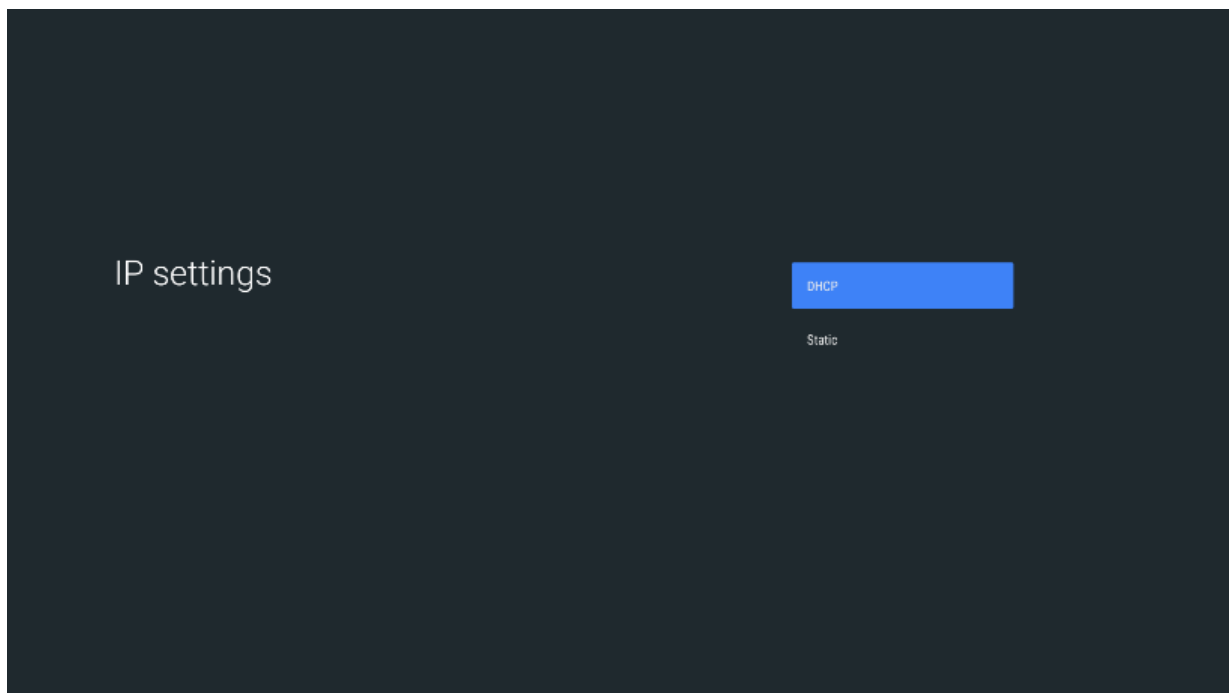
4.2.1.4 Proxy settings (For LAN Cable)

You can define a proxy server for access to the Internet.

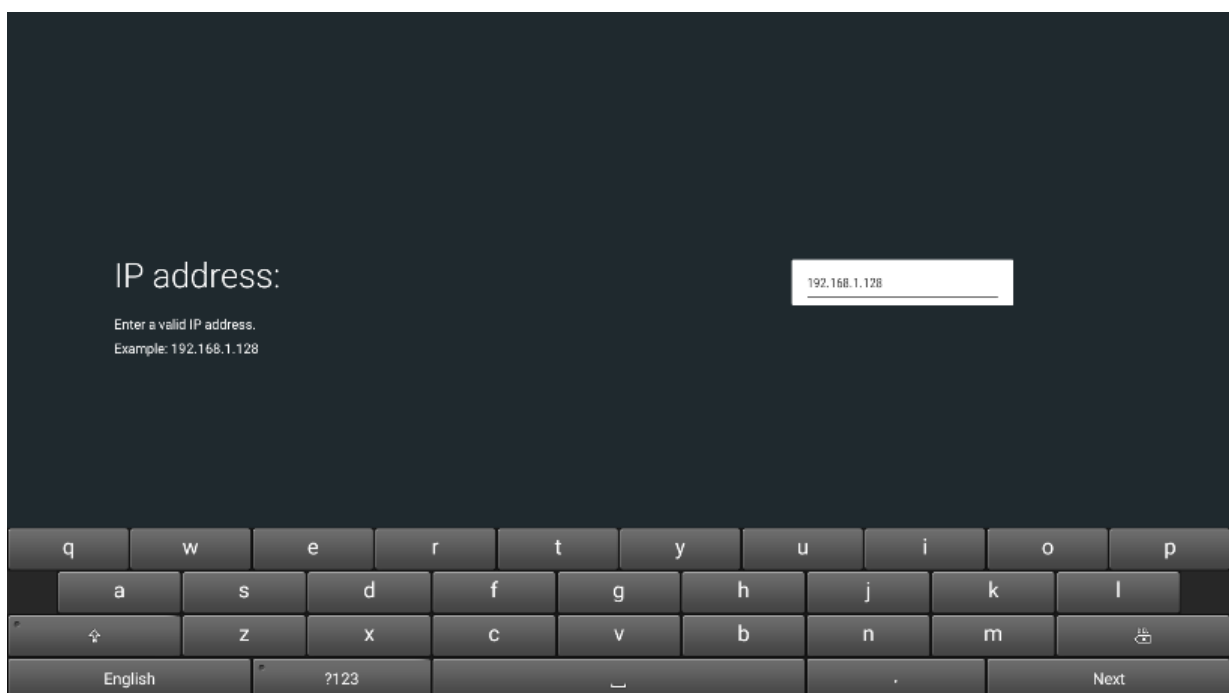
Input is possible either via a connected USB Keyboard, or with the Remote Control/Touch/USB Mouse via the onscreen keyboard. Press the back button on the remote control to close the keyboard and navigate the text field.

4.2.1.5 IP Settings (For LAN Cable)

First select automatic assignment of the IP address via DHCP or manual (static). With DHCP you don't have to do anything else if your network supports this function.



If you choose Static, you can define the IP Addresses/Gateway/Subnet/DNS here. Input is possible either via a connected USB Keyboard, or with the Remote Control/Touch/USB Mouse via the onscreen keyboard. Press the back button on the remote control to close the keyboard and navigate the text field.



4.2.2 Display Setup

You can reach the resolution settings by selecting *Display Setup / Display / Screen Resolution*.

4.2.2.1 Auto switch to best resolution

Activate this function to automatically select the displays preferred resolution (EDID).

4.2.2.2 Display Mode

Select the desired resolution. After the selection you will be asked to confirm within 15 seconds before the previous resolution is restored.

4.2.2.3 Colour Depth Settings

On: 10 Bit Colour Depth (HDR)

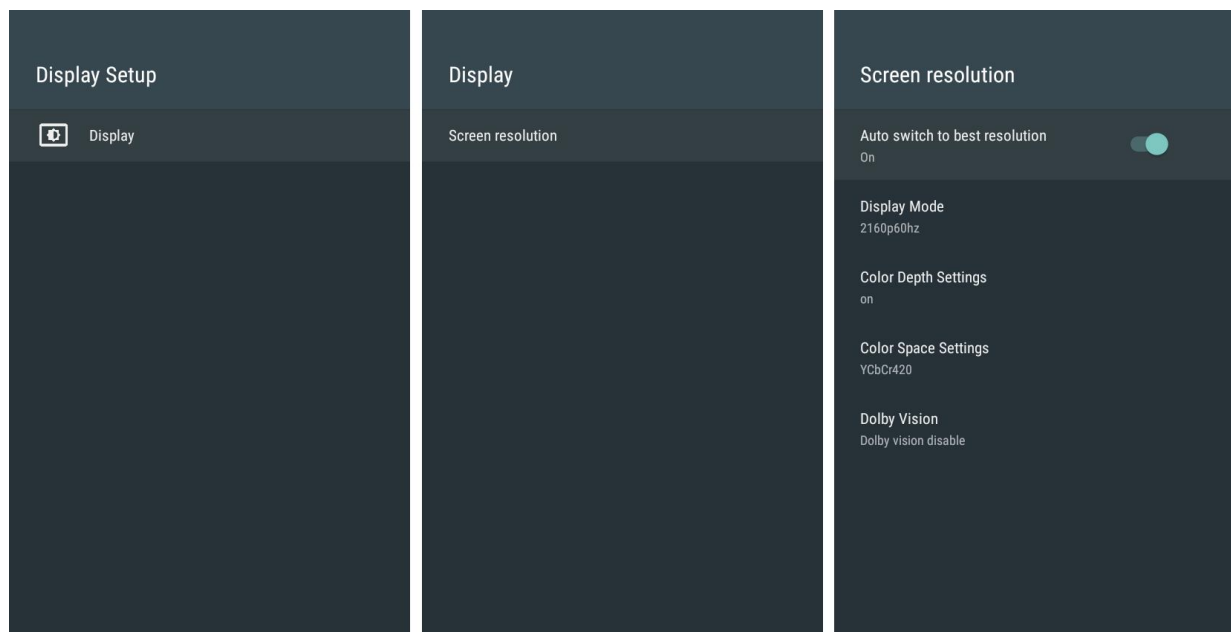
Off: 8 Bit Colour Depth

4.2.2.4 Color Space Settings

Choose your desired colour space.

4.2.2.5 Dolby Vision

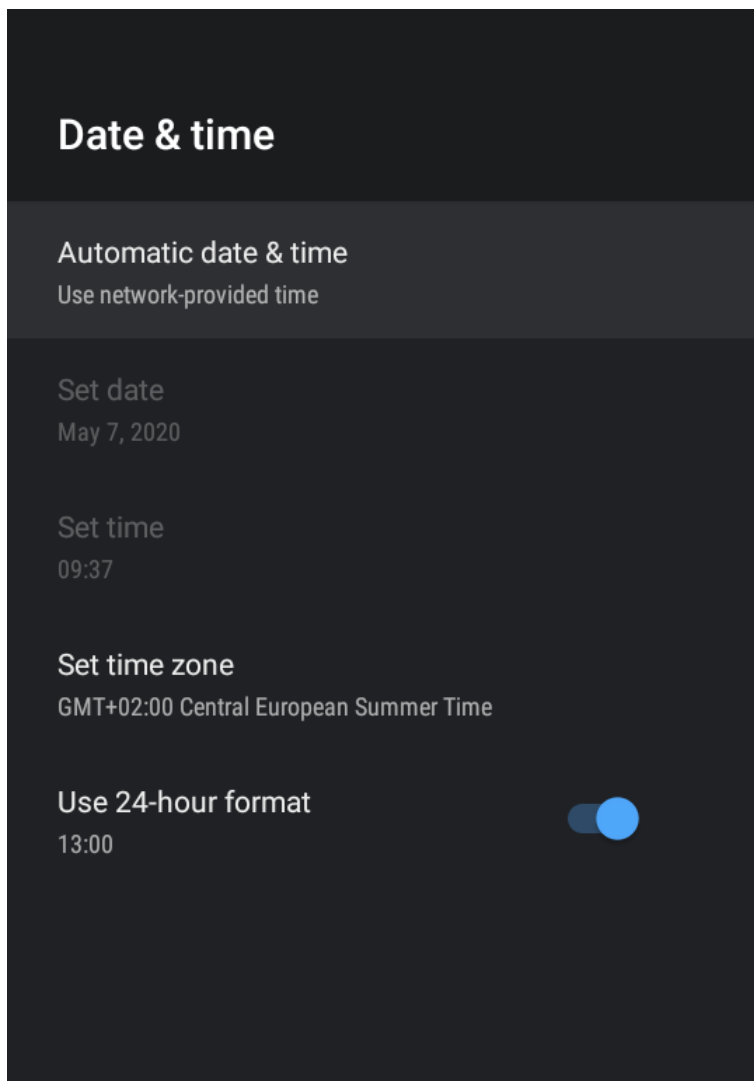
Activate or Deactivate Dolby Vision HDR. (Experimental!)



Set the date and time either automatically via an NTP Server, or manually.

You can also define the timezone.

The time and date is maintained when the power is disconnected via an internal battery.



4.2.1 Bluetooth Setup

The Media Player 4K Light supports the connection of Bluetooth devices, for example, Speakers or Headphones.

In order to add a new device (Pairing), choose Add Accessory and activate Device Search (Pairing) on your device.

As soon as a device has been found, it can be selected from the list to connect it to Media Player 4K Light.

Remotes & Accessories



Add accessory



SW-BTE-01



Searching for accessories...

Before pairing your Bluetooth devices, make sure they're in pairing mode

4.3 CFPSETUP.TXT FILE

HDMI Auto On

Resolution 3840x2160p60

Volume 5

DHCP On

IP 192.168.0.2

Subnet 255.255.255.0

Gateway 192.168.0.1

DNS 192.168.0.1

UDP Port 4950

NTP Control On

Timezone CET

Standard Displaytime 5

Orientation Landscape

ShowTouch Off

4.3.1 Video und Audio Settings

HDMI Auto On

Resolution 3840x2160p60

Volume 5

- HDMI Auto
 - **Off:** Selected resolution will be applied.
 - **On:** The resolution of the Media Player 4K Light will be selected automatically according to the displays preferred settings. This is the default configuration.
Sometimes the display will not request the best possible resolution. In these cases, the correct resolution should be manually applied.
- Resolution
 - Select the resolution of the display.
- Volume
 - Values from 0 to 10
 - 0 Mute
 - 10 max. Volume

4.3.2 Netzwerk

DHCP On

IP 192.168.0.2

Subnet 255.255.255.0

Gateway 192.168.0.1

DNS 192.168.0.1

UDP Port 4950

- DHCP
 - **Off:** Your IP, Subnet, Gateway, DNS settings will be applied.
 - **On:** IP settings will be provided by DHCP server. Custom values will be ignored.
- IP Address
- Subnet mask
- Gateway
- DNS
- UDP Port:
Default Port is 4950. For synchronised playback, all Media Players 4K Light must use the same port

4.3.3 Display Time

Displaytime 5

Duration that images or HTML content are displayed on screen in seconds by default.

4.3.4 Orientation

Orientation Landscape

Images and Websites will be displayed in Landscape orientation

Orientation Portrait

Images and Websites will be displayed in Portrait orientation.

For videos, the aspect ratio is reversed, but the videos themselves are not rotated.

4.3.5 ShowTouch

ShowTouch On

When using a touch screen, a short animation is shown on the display at each touch.

ShowTouch Off

There will be no animation shown for each touch.

5 PLAYBACK

5.1 WITHOUT PLAYLIST

The easiest way to playback media files is to:

1. Copy the files to the root directory of the SD Card / USB storage.
2. Plug the SD Card / USB storage into the Media Player 4K Light.

The Media Player 4K Light starts the playback of the files in alphanumerical order (0-9, A-Z). Videos will be played once, image content is displayed for the duration defined as Displaytime (Default is 5 seconds) Once all files have been played, the cycle will restart with the first item.

Special cases:

- **Single video on SD Card:** Will be looped seamlessly (no black frame)
- **Single picture on SD Card:** Will be displayed continuously

Example of the alphanumerical playback order:

1. 0.jpg
2. 05_movie5.mp4
3. 1.mp4
4. movie1.mov
5. picture2.jpg

5.2 WITH PLAYLIST (PLAYLIST.TXT)

If you want to have full control over the order in which the items will be played, or if you want to use advanced features during playback, you can create a PLAYLIST.txt.

It is created as a normal text file, that contains the file names and optional entries, that control the succession of an item or advanced features.

In order to do this:

Create a text file with a text editor of your choice and name it "PLAYLIST.txt".

Example:

```
[ITEM 0]  
File=Movie1.mp4  
  
[ITEM 1]  
File=Pic1.jpg  
Displaytime=12  
  
[ITEM 2]  
File=Movie2.mp4
```

5.2.1 Required Parameters

- **[ITEM #]**
Every item in the playlist must begin with this entry. Replace # with the index, that the file should have. This index defines the position of the item in the overall playback order.
First index is 0.
 - Example:
[ITEM 0]
- **File=Name**
Filename incl. file extension. Case sensitive! Spaces in the filename are not permitted.
 - Example:
File=Film1.mp4

5.2.2 Optional Parameters

- **Displaytime =#**
Value in seconds, that image or HTML5 content will be displayed until the next item starts.
Default is 5 seconds.
If you want to display the item permanently, enter -1.
 - Example:
Displaytime=6
(Item will be displayed 6 seconds.)
Displaytime=-1
(Inhalt wird endlos lange angezeigt.)
- **Succ=#**

Successor of the current item.

- **Example:**

Succ=1

(Next will be ITEM 1.)

- **Loop =#**

Defines, if current video should be looped

- **Example:**

Loop=-1

(Movie looped continuously)

Loop=-5

(The movie is looped 5 times until playback of next item starts.)

- **Volume=#**

Change volume for an item without changing the overall volume

0 (0%) to 10 (100%)

- **Example:**

Volume=3

- **Interruptible =**

Can the item be interrupted by an external command or will it play until the end.

- **Example:**

Interruptible =TRUE

(File may be interrupted)

Interruptible =FALSE

(File may not be interrupted)

- **IP xxx.xxx.xxx.xxx**

Send an UDP message to the IP xxx.xxx.xxx.xxx and Port PORT

- **Example:**

IP 192.168.0.5 4095 Lamp On

Send the message „Lamp On“ to the IP 192.168.0.5 and Port 4095

5.2.3 Scheduled Playlist

You can define time windows, in which a file is valid for playback. You can define start and end dates as well as start and end times. Additionally, you can define weekdays.



Important Notes

Please make sure, that the Media Player 4K Light is set to the correct time and date.

Example:

[ITEM 0]

File=Movie1.mp4

Start date=25.5.2018

End date=01.08.2018

Start time=00:05:00

End time=16:00:00

Weekdays=Mon,Tue,Sat

[ITEM 1]

File =Movie2.mp4

Start date=8.8.2008

End date=23.9.2008

Start time=10:15:0

End time=12:30:0

- **Start date=**

First day that an ITEM is allowed to play

- Format: dd.mm.yyyy

- **Example.:**

Start date=25.05.2018

Don't play ITEM before 25.5.2018

- **End date=**

Last date the ITEM is allowed to play

- Format: dd.mm.yyyy

- **Example.:**

End date=01.08.2018

ITEM will be played until 1.8.2018. It will not be played anymore on 2.8.2018

- **Start time=**

Start time

- Format: hh:mm:ss

- **Example:**

Start time=14:00:00

ITEM plays after 14:00:00.

- **End time=**

End time

- Format: hh:mm:ss

- **Example:**

End time=18:00:00

ITEM will be played until 18:00:00.

- **Weekdays=**

Weekdays, on which the ITEM is allowed to play.

- Format: Mon,Tue,Wed,Thu,Fri,Sat,Sun

- **Example:**

Weekdays=Mon,Tue,Sat,Sun

ITEM is only allowed to play on Mondays, Tuesdays, Saturdays and Sundays.

Important Notes

These are time windows. A movie will not be stopped as soon as the end time is reached. It will continue playing until the end of the file and then not be started anymore if past the end time.

5.2.1 HTML5 Browser

You can display HTML5 files on the internal Web browser of the Media Player 4K Light.

The browser can display HTML5, php, CSS, JavaScript, etc...

It is based on a webkit-browser, which means you must use the webkit- syntax for advanced CSS features:

(i.e. -webkit-transition: ...)

There are two possibilities to display HTML5 content:

1. Copy all files including subfolders to the SD card / USB storage. Even the main html/php files may be located in subfolders.

Example:

[ITEM 0]

HTML=Website1/index.html

Displaytime=120

- **Displaytime=#**

Displaytime in seconds. Default is 5 seconds. You can change the default value in the configuration

If you want to display the item permanently, enter -1.

- **Example:**

Displaytime=6 Content will be displayed for 6 seconds.

Displaytime=-1 Content will be displayed permanently.

- **HTML=**

Filename of the main file of your HTML5 project. The paths are relative to the root directory of the SD card or USB storage.

2. Choose an online HTML source to display. Make sure to define complete URL including "http://".

Example:

[ITEM 0]

HTML=http://www.molitor-berlin.de

Displaytime=-1

[ITEM 1]

File=Movie2.mp4

You can mix HTML content and videos and images in the PLAYLIST.txt.

Important Notes

The URL must be accessible! Otherwise, the ITEM will be skipped instantly.

6 EXTERNAL CONTROL

6.1 CONTROL VIA UDP (USER DATAGRAM PROTOCOL)

The Media Player 4K Light can be controlled via UDP messages. You can access the player with its IP address and the configured UDP Port. The default Port is 4950 but can be assigned freely ([Network](#)).

6.2 PLAYBACK COMMANDS

6.2.1 PAUSE

Syntax

PAUSE

Alternative

PAUS

Function

Playback is paused

6.2.2 CONTINUE

Syntax

CONTINUE

Alternative

CONT / FORTSETZEN / RESUME / RESU

Function

Continue playback of a paused ITEM

6.2.3 PAPL

Syntax

PAPL

Alternative

PAUSEPLAY

Function

Pause/Play toggles Pause and Continue.

If playback is paused, it will continue.

If playback is running, it will be paused.

6.2.1 STATUS?

Syntax

STATUS?

Function

Return the current playback state: playing, paused or stopped

6.2.2 NEXT

Syntax

NEXT

Function

Triggers the next ITEM

If the current ITEM is the last ITEM, playback will restart with the first ITEM.

6.2.3 PREV

Syntax

PREV

Function

Triggers the previous ITEM

6.2.4 PLAY

Syntax

PLAY=nnnn

Alternative

PLAYINDEX=nnnn

Function

Starting playback of ITEM with index nnnn

Parameter

nnnn

Index of ITEM to be played

The index is either the ITEM number in the PLAYLIST.txt [ITEM nnnn] or the position of the file in alphanumerical order on the SD card / USB storage.

Example

PLAY=2

Playback of ITEM 2 is started

6.2.1 PLAYFILE

Syntax

PLAYFILE=Filename.fileextension

Alternative

PLAYDATEI=Filename.fileextension

Function

Start playback of given file

Parameter

Filename including file extension

Example

PLAYFILE=FILM1.mp4

6.2.1 JUMP

Syntax

JUMP=nnnn

Alternative

JUMPTIME=nnnn

Function

Jump to a given position in a video.

Parameter

nnnn

Position to be jumped to in milliseconds.

Values from 0 to total duration of video.

Example:

Jump=20000

Jump to 20 seconds.

6.2.2 RUNTIME?

Syntax

RUNTIME?

Alternative

LAUFZEIT?

Function

Returns the runtime of the ITEM

Example

RUNTIME?

Returns: *RUNTIME=25000*

Current runtime of ITEM is 25 seconds

6.2.3 TIMETOFINISH?

Syntax

TIMETOFINISH?

Alternative

RESTLAUFZEIT?

Function

Returns the remaining duration of the ITEM in milliseconds

Example

TIMETOFINISH?

TIMETOFINISH=25000

Current ITEM has a remaining duration of 25 seconds

6.3 FILE COMMANDS

6.3.1 PLAYLIST?

Syntax

PLAYLIST?

Function

Get contents of Playlist

Example:

PLAYLIST?

Example Reply:

[ITEM 0]

File=1.jpg

Displaytime=2

[ITEM 1]

File=2.mp4

6.3.1 FOLDERLIST?

Syntax

FOLDERLIST?

Function

Get content of SD Card or USB Storage

Example

FOLDERLIST?

Example Reply:

1.jpg

2.mp4

PLAYLIST.txt

CFPSetup.txt

6.4 USB TOUCHSCREEN

The Media Player 4K Light can be controlled by a Touchscreen connected via USB.

For every ITEM in the Playlist a total of 127 touch fields can be defined. These fields are only active during the playback of this ITEM. If another clip is started, completely independent new fields can be set. The touch windows are defined via X- and Y- coordinates as well as their width and height.

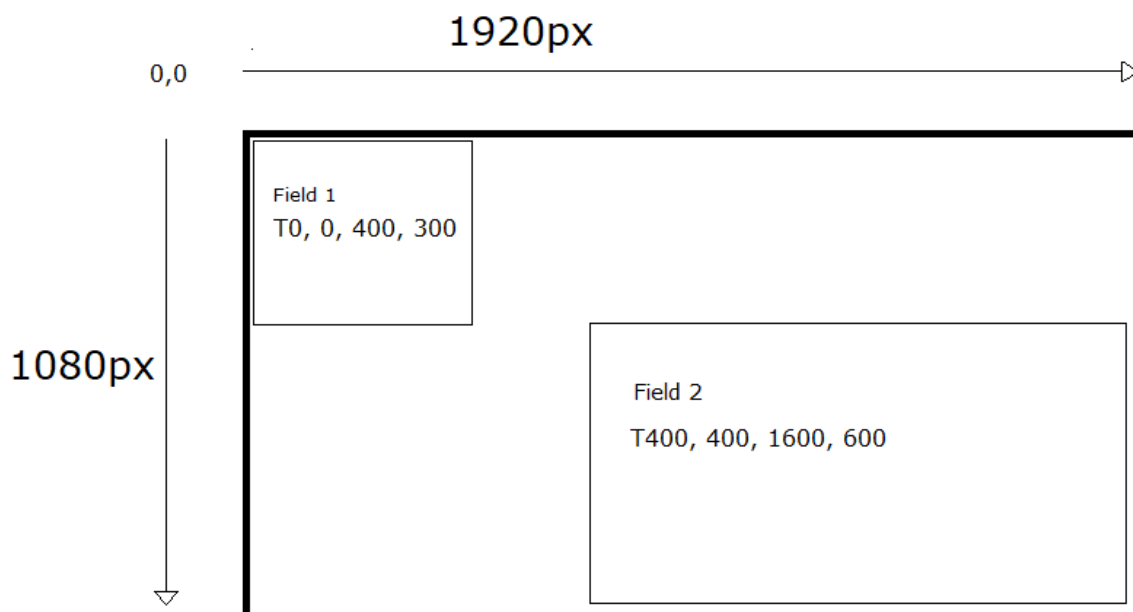
6.4.1 HTML with Touch

If you display HTML pages, the touch screen can be used directly without any further steps. You can open, zoom and swipe links with the touch, just like you are used to on a smartphone or tablet.

6.4.2 Touchscreen

The Media Player 4K Light scales the touchscreen coordinates for most Touchscreens to the resolution **1920 X 1080 pixels** (except for special cases!)

The coordinate X:0 and Y:0 is located at the top left.



Playlist for the example above:

[ITEM 0]

File=Film1.mp4

T0, 0, 400, 300, 0=PLAY 1

T400, 400, 1600, 600, 0=PLAY 3

[ITEM 1]

File=Film2.mp4

T0, 0, 1920, 1080, 0=PLAY 0

Command Syntax	Txxx, yyyy, www, hhhh, a, ccc[=ppp]
T	Syntax for touch
xxx,	X-coordinate of upper-left edge of touch field
yyy,	Y-coordinate of upper-left edge of touch field
www,	Width of touch field
hhh,	Height of touch field
a=	1: React on press 0: React on release
ccc	Command
[=ppp]	Optional parameter. Example Item number at "PLAY= 2"
Example	T0, 0, 1280, 720,01=PLAY 0

Command	Function
PAUSE	Pause playback
CONTINUE	Continue playback
PAPL	PAUSE/PLAY

NEXT	Start next item
PREV	Start previous item
PLAY nn	Start playback of item “nn”
VOLUME=nn	Set volume to nn (Min:0, Max: 10)
AUDIOTRACK=nn	Select audiotrack nn

6.5 USB NUMBLOCK



You can use any USB Numblock to control playback on the Media Player 4K Light.

- Entry in CFPSetup.txt:

USB Type Numblock

By default, pressing Keys 0-9 will start ITEM 0-9.

Key 1: ITEM 1

Key 2: ITEM 2

...

You can also assign your own commands for this, as described below by using the command KeyOff.

Possible Special Commands:

Code	Type	Parameter	Function	Example
.d	Distance	+ Number of items - Number of items	Jump forward X items Jump backward X items	<i>Key1=+1.d</i> <i>Key2=1.d</i>
.t	Trickmode	+1 (PAUSE) - 1 (PLAY) 2 (PAPL)	Pause Resume Pause/Play	<i>Key1=+1.t</i> <i>Key2=-1.t</i> <i>Key3=2.t</i>
.v	Volume	+ Number (Max: 10) - Number (Min:0)	Increase Volume Decrease Volume	<i>Key1=+5.v</i> <i>Key2=-5.v</i>
.j	Jump	+ seconds forward -seconds backward	Jump X seconds forward in video Jump X seconds backward in video	<i>Key1=+10.j</i> <i>Key2=-10.j</i>
.x	Random	1	Jump to random item in playlist	<i>Key1=1.x</i> <i>Key2=1.x</i>
.a	Audio track	ID of audio track	Select audio track of video	<i>Key1=1.a</i> <i>Key2=2.a</i>

[ITEM 1]

...

KeyOff

Num0=0

Num1=1

Num2=2

Num3=3

Num4=4

Num5=3

Num6=3

Num7=3

Num8=3

Num9=3

NumPlus=1.d

NumMinus=-1.d

6.6 USB PRESENTER



You can use a USB Presenter to control the playback. Currently supported are Logitech models like R400.

- Entry in CFPSetup.txt:

USB Type Presenter

Default assignment of the 4 keys:

Prev (Key25), Next (Key26), Play/Pause (Key27/28), Jump to first Item(Key29)

Play/Pause key is toggling Key27 und Key28.

Key27 – Klick – Key28 – Klick – Key27 – Klick – Key28 ...



You can also assign your own commands for this, as described below by using the command KeyOff.

As well as any special commands described in section 6.5.

The 4-5 keys are assigned to Keys 25-29.

[ITEM 1]

...

KeyOff

Key25=0

Key26=1

Key27=2

Key28=3

Key29=4

6.7 USB KEYBOARD

You can connect a USB Keyboard to one of the USB ports of the Media Player 4K Light to control the menu and HTML Websites.

6.8 USB MOUSE

You can connect a USB Mouse to one of the USB ports of the Media Player 4K Light to control the menu and HTML Websites.

7 APPENDIX

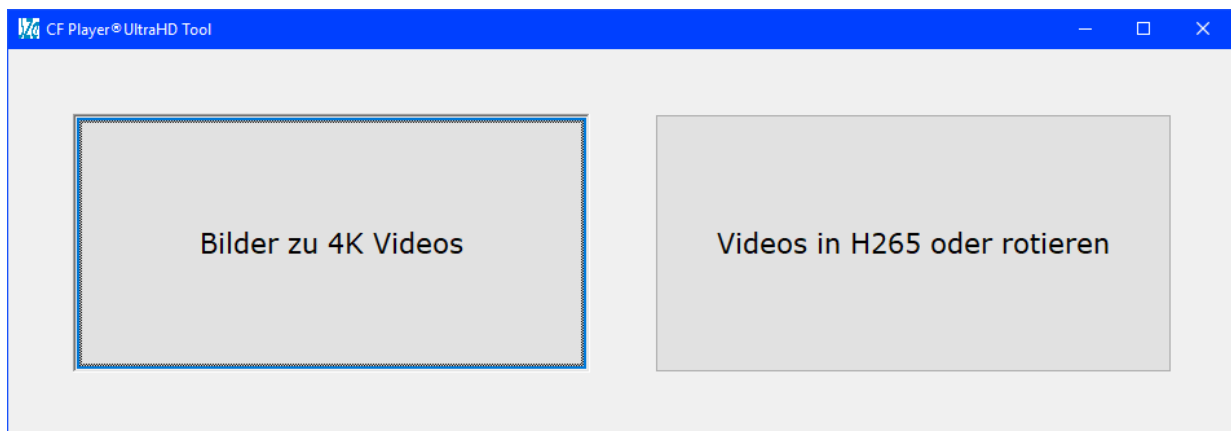
7.1 ULTRAHD VIDEOTOOL

7.1.1 Java Installation

In order to start the UltraHD Converter, you will need the current version of Java installed on your PC. You can download and install this free of charge here: www.java.com/en/download/

7.1.2 Starting the UltraHD VideoTool

Now you can start UltraHD_Video.jar by double clicking it. The following window will open:



The Media Player 4K Light VideoTool consists of two components:

1. Images to 4K Videos (Left):

The Media Player 4K Light can display pictures in a maximum resolution of full HD (1920 x 1080pixels). If you would like to display in UltraHD resolution, you can convert the pictures to 4K videos with this included UltraHD converter!

2. Convert videos to H.265 or Rotate (Right):

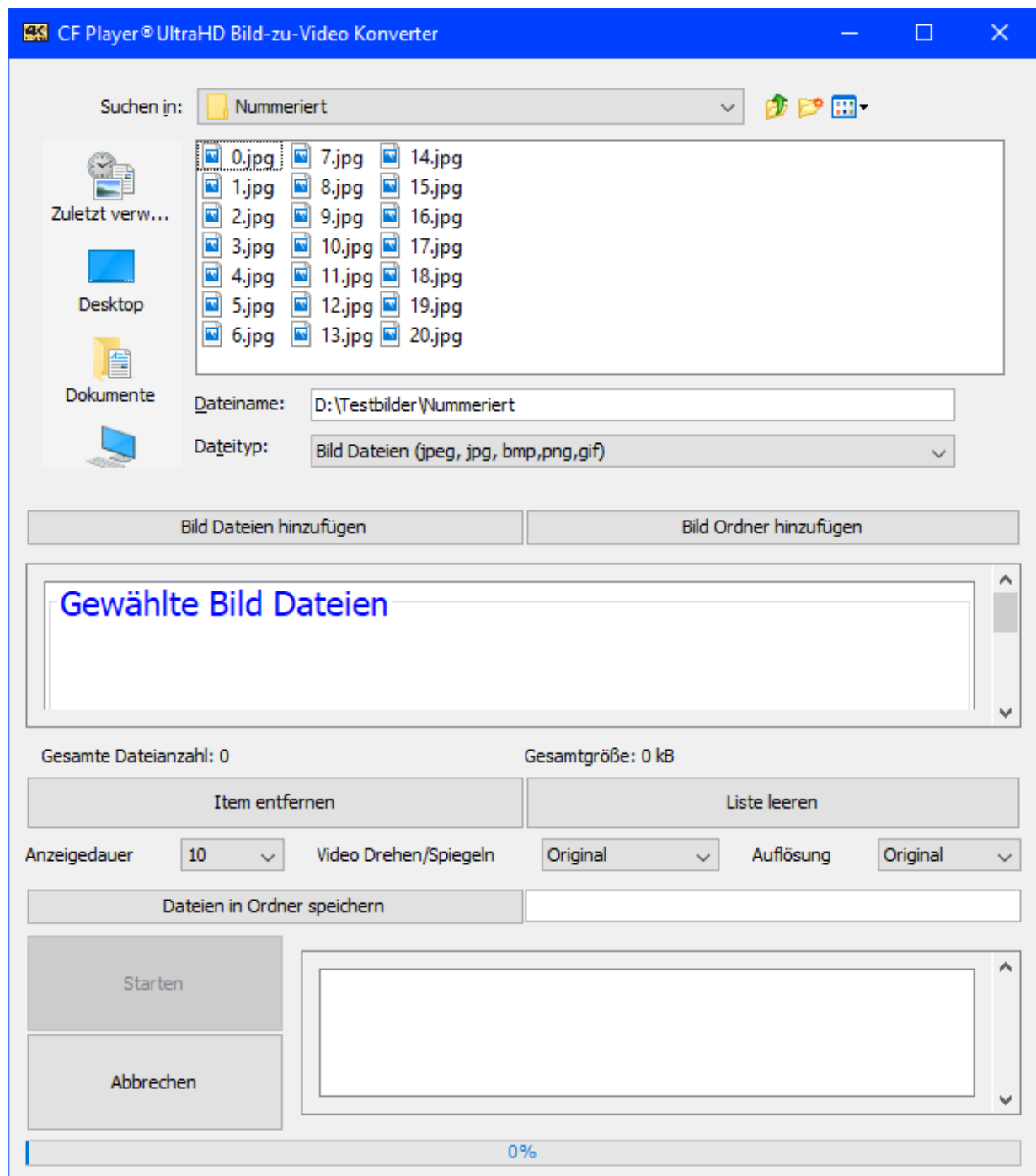
The Media Player 4K Light only supports the full 4K resolution (3840 x 2160p60) with H.265 or VP9 videos. If you want to play H.264/AVC videos in 4K, you will first need to convert them to H.265.

7.1.3 Converting images to 4K videos

In order to display your pictures in the best possible resolution of 3840x2160 pixels, they must first be converted to videos with the H.265 video codec.

At the same time you can also adjust the orientation (rotated / mirrored), or the resolution.

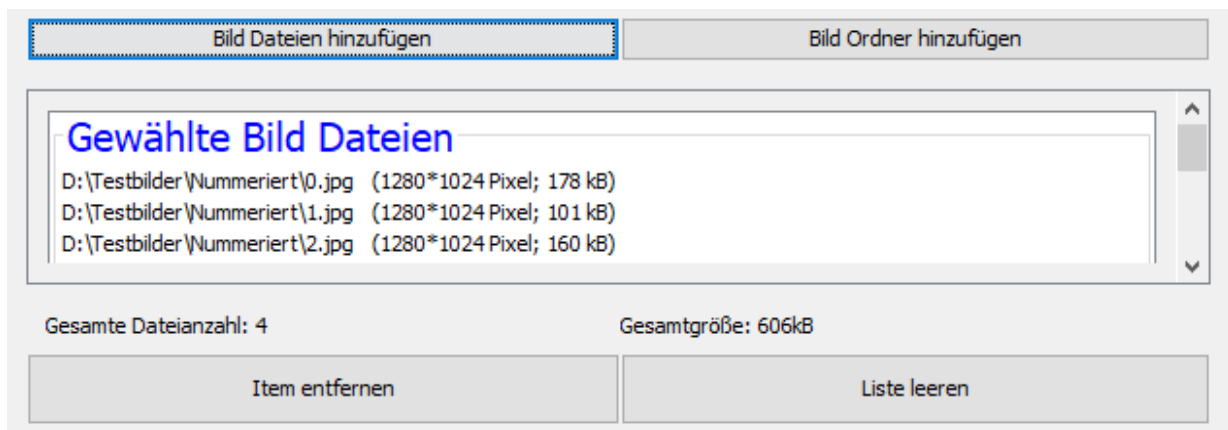
In addition, you can freely determine the image display duration.



7.1.3.1 Select image files

Now select your folder with the 4k images in the Explorer window and then press "Add image files" (Bild Dateien Hinzufügen).

The selected files will then appear in the list under "Selected image files" (Gewählte Bild Dateien).



7.1.3.2 Choose Settings



- Select the length of the resulting video under Display Duration (Anzeigedauer) in seconds.
- Select the orientation of the resulting video (original, 90° Right, 180° Mirrored, 270° Right). (Video Drehen/Spiegeln)
- Select the resolution of the resulting video. For the highest resolution, choose 3840 x 2160. (Auflösung).

7.1.3.3 Choose destination folder

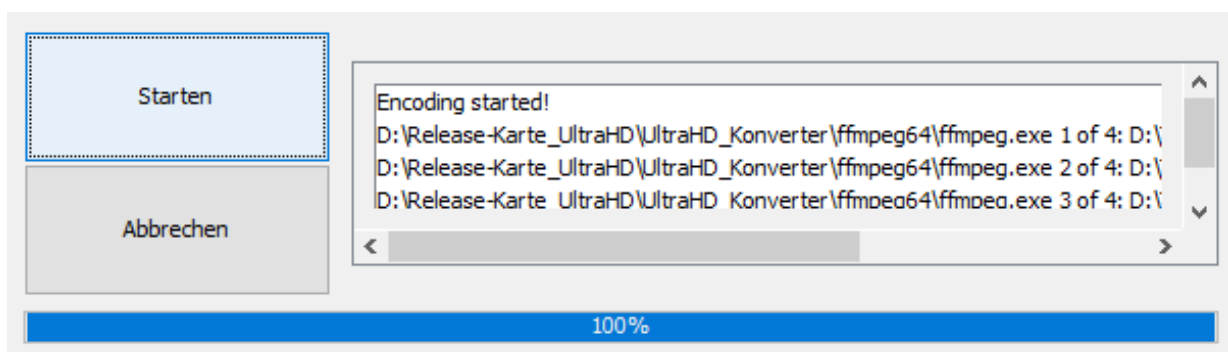
Choose where the videos should be saved.



7.1.3.1 Start the conversion

Click on Start (Starten), to begin the conversion.

You can see the conversion status via the progress bar at the bottom. When all videos have been created, a window will open to let you know.

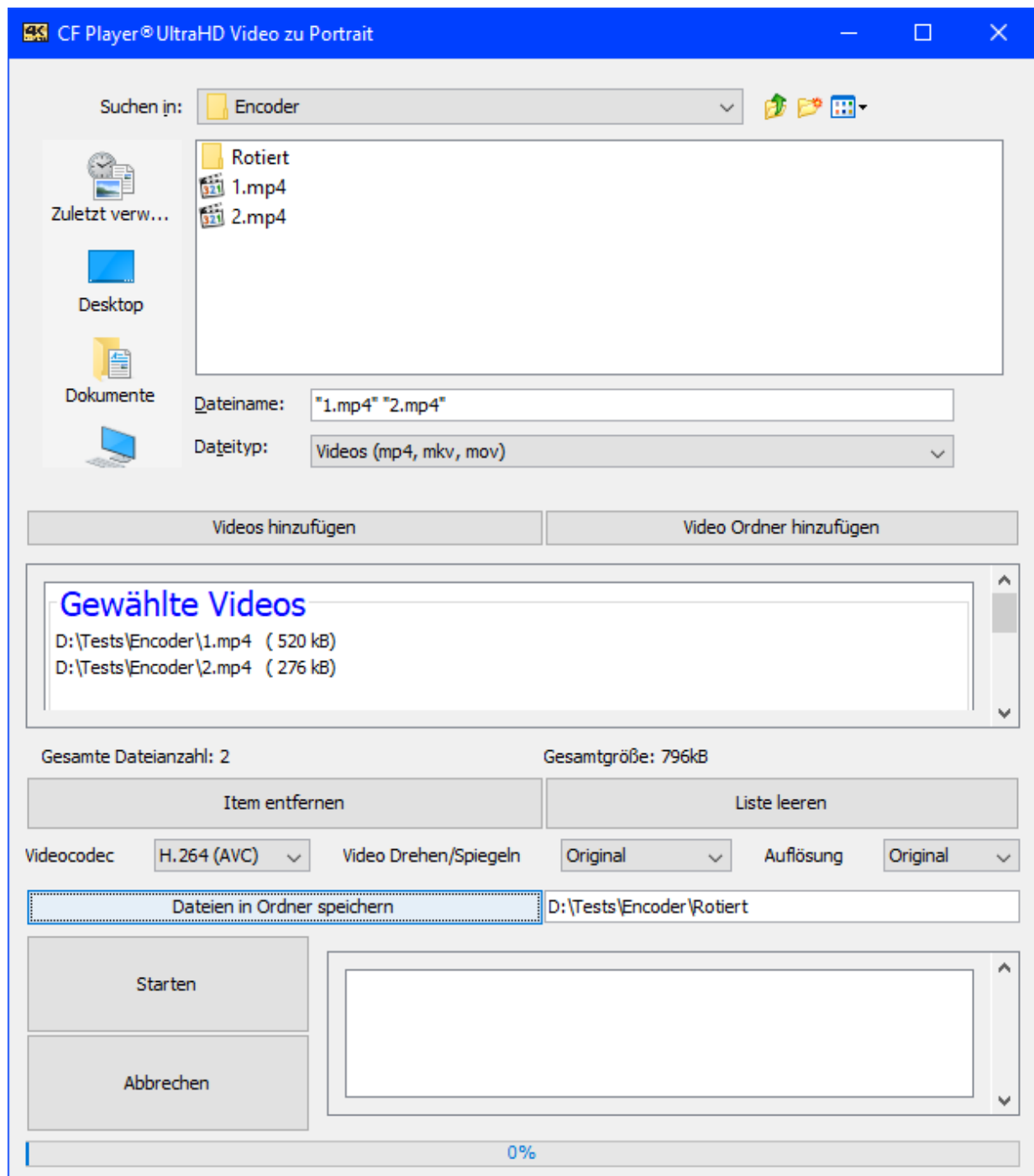


7.1.3.2 Copying files to your SD Card/USB Storage device

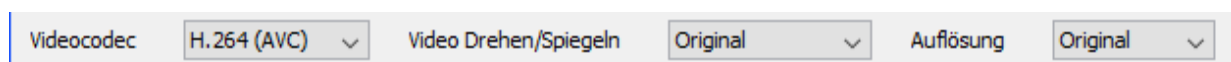
You can now copy the converted videos to your SD Card or USB stick and insert it into the Media Player 4K Light. Afterwards you can enjoy your pictures in the best 4K resolution.
Soon it will also be possible to convert the pictures to HDR videos for even better contrast.

7.1.1 Converting Videos to H.265 or changing the orientation (Rotate / Mirror)

Select your video folder in the explorer window and then press Add Videos (Videos hinzufügen)
The selected files will then appear in under the list Selected Videos (Gewählte Videos)



7.1.1.1 Choose Settings

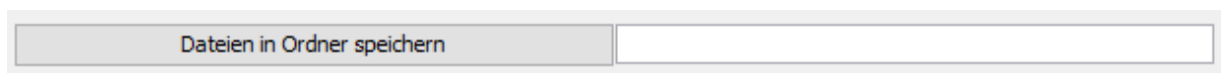


- Video Codec:
 - H.264(AVC):

- Maximum resolution 1920x1080p60
- H.265(HEVC):
 - Maximum resolution 3840x2160p60
- Video Rotate/Mirror (Drehen/Spiegeln):
 - Original
 - 90° Right
 - 180° Mirrored
 - 90° Left
- Resolution (Auflösung):
 - Original
 - 3840x2160
 - 1920x1080
 - 1280x720
 - 720x576

7.1.1.2 Choose destination folder

Choose where the videos should be saved.



7.1.1.3 Start the conversion

Click on Start (Starten), to begin the conversion.

You can see the conversion status via the progress bar at the bottom. When all videos have been created, a window will open to let you know.

7.1.1.1 Copying files to your SD Card/USB Storage device

You can now copy the converted videos to your SD Card or USB stick and insert it into the Media Player 4K Light. Afterwards you can enjoy your converted videos in the best 4K resolution.

7.2 UPDATE FIRMWARE

7.2.1 Download files

You can update the firmware locally by downloading the files from our FTP Server and then copy them onto an SD Card or USB Storage.

Connect with any FTP Client to our Server using the following details:

Server: ftp.sze.com

Username: szeweb493web3ftp5

Password: SZekunden18!

There you will find the folders

- Light

- Firmware (Update Files)
 - Release (SZe Firmware)
 - Image (Operating System inc. SZe Firmware)
- Current User Manual
- Tools (Software)
- UltraHD (Not for this Player)
- fullHD2.0 (Not for this Player)
- fullHDv1.0 (Not for this Player)

Inside the Firmware Folder you will find:

- Release (Update Files)
- Changelog.txt

7.2.2 Release Update

When you open this folder you will see subfolders with the version numbers.

Now select the folder with the highest version number. The highest number is the most current version.

This is where the file is located:

- SZe.app

Download this file and copy it to a MicroSD card or USB memory. Insert it into the Media Player 4K Light and power it on.

The update will be performed automatically and the file "SZe.app" will be deleted afterwards.

7.1 EC – DECLARATION OF CONFORMITY

We herewith declare that the product

Product Name	Media Player 4K Light
Description	Device to playback digital video files stored on SD Cards
conforms with the provisions of the directive:	89/336/EEC (EMC directive) amended by 91/263/ECC, 92/31/ECC, 93/68/ECC
The application of this directive is according to the declaration in the instruction manual. And furthermore, declare that the following parts of standards and documents have been applied:	EN61000-6-1 Immunity for residential, commercial and light industrial EN61000-6-3 Emissions for residential, commercial and light industrial

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