

[HD Televizija - HDTV eZine](#) Basics, news, directions HD devices and tests - all you need to know from the HD and even more!

## Review [Media Center]: Mede8er MED500X (+ video)

Jasmin Custovic - Nani | 12/12/2009 | 23:20 -- Translated with Google translate

Original - <http://hdtelevizija.com/2009/12/12/recenzija-media-centar-mede8er-med500x-video/>



On the test we get, **Mede8er**, Conditioning-MKV player who was the first competitor to the specifications of an extraordinary cost and hardware and software, Popcorn Hour in Hour A-100/110 and WD HDTV MKV players. Let's look at whether they have a Popcorn and WD reason to panic ...

The question that recently often repeated over the forums, print and electronic media is: "*How best to use a new purchased LCD or plasma?*"

This question entails, and the economic factor and the fact that the content stored on a high-definition Blu-ray discs are still expensive and largely inaccessible to the average consumer watching.

Specifically, let the Blu-ray player that is still not affordable cost - the price of 2,000 kuna for the first models, and BD films for approx. 200 kn average (in this moment do not look beyond the borders of movies available), this is still expensive sport in which the majority does not want to invest.

Buy HD ready or full HD TV and still see only the SD signal or DVD is also not a good investment because this task the old CRT screens are performing quite well, some would say the best when it comes to SD signal.

**What is compromise?**

MKV players and HTPC! HTPC is nothing more than an ordinary PC, hardware and software customized to play different audio-video formats. HTPC is the most flexible solution but also the most complicated and quite expensive at the same time.

MKV players are in fact multi-media devices able to play almost every video and audio formats and are at such a close line HTPC solutions, the prefix "MKV" they get because they play the most popular format known for packing HD content -- [MatRoska Video](#) file, known as the MKV. Thus, the MKV container is the HD content that is ripped from Blu-ray discs (HD television distances himself from any illegal content and discussion on this topic), or recorded video from HD satellite channel.

Here it is important to note that this HD content prebačenom to the hard disk, the problem can not add local translation in mind. Srt or. Sat subtitles, usually copied from DVD movies and custom film in HD. On the Internet, many applications for this type of manipulation subtitlovima, better known [Time Adjuster](#), Which is of course *freeware*.

Every year, when he appeared first Blu-ray discs on the market appear accordingly MKV *Players* with different options in different pricing classes.

We believe that the vast majority of readers heard about HD TV HDTV WD media / Live player - MKV player who is literally *plug and play*, Which most users today and search.

It is important to mention expensive and almost three times better known as the Popcorn Hour and NMT (Network Media Tank), which is in essence a gift to the possibility of integration S-ATA internal hard disk and *streaming* video and audio content over a network. The new version of WD HDTV player called "Live" has streaming capabilities as the original version did not have a network port.

Navedneom we can freely say that the latter two mentioned MKV player was the only solution for MKV playback, which could be found in stores.

Dobavlјivost Popcorn Hour is in a very uncertain time of writing, while the WD HDTV is present in large quantities on the shelves of consumer electronics stores.



On the test we get, Mede8er, conditioning-MKV player who was the first competitor to the specifications of an extraordinary cost so hardwerski and softwerski, Popcorn Hour A-100/110 and WD HDTV MKV players.

## The Greatest Show On Earth



Movies



Pictures



Music



Internet Radio

### Specifications

- **Processor:** Realtek RTD1073DD - 128MB SPI Flash - 128MB DDR2 SDRAM
- **Rise up-and Video Codec:** MKV, H264, DVD (VOB - IFO - ISO), DIVX, XVID, DAT, AVI, MPEG, MPEG-2 HD, TS, HD MPEG-4 SP, ASP, AVCD (H.264), MTS, M2ts, WMV9, FLV, VC-1, Real Networks (RM / RMVB) 8/9/10, up to 720p
- **Rise up-and Audio Codec:** MP3, MP2, OGG Vorbis, PCM, LPCM, AAC, RA, AC3 Passthrough Dolby, Dolby AC3 downmix, DTS Passthrough, Downmix DTS, FLAC, WAV, Standard WMA (DRM & Advanced Profile is not podran)
- **HD Audio support**  
 Dolby Digital - podrano decoding and forwarding (bypass)  
 Dolby TrueHD - not supported -- **the construction phase and testing**  
 Dolby Digital Plus - podrano decoding - forward in the testing phase  
 Dolby Digital EX - podrano - compatible to 5.1  
 Dolby Digital Pulse - no podran  
 DTS Digital Surround - podrano decoding and forwarding (bypass)

DTS-HD Master Audio - no podran -- **the construction phase and testing**

DTS-ES - no podran

- **Supported image formats:** JPEG, BMP
- **Supported file system (File System):** FAT32, NTFS - UI feature Format
- **Connections**
  - HDMI 1.3, Component Video, Composite Video
  - Stereo RCA audio connections for analogue audio
  - SD / Sony Pro Duo Card Slot
  - S / PDIF optical output / RCA Coaxial Digital Output
  - Video Resolution - NTSC, PAL, 480p, 576p, 720p, 1080i, 1080p, 1080p24hz
  - USB - 2.0 HOST port x 2 (compatible with USB 1.1)
  - USB - 2.0 SLAVE port
- **General**
  - Install 3.5 "SATA Internal Hard Drive, podžran up to 2 TB
  - Built-in 40mm cooler - TPE supports for low noise levels
  - Creating playlists via the remote control
  - Built-in NFS Client
  - Screensaver - Optional settings in the GUI
  - JPEG version folder (preview feature) for movies and music
  - Button for easy navigation
  - Time bar (Bar Time) for fast and slow forward and back rewind (FF / FR) and Time Bar (jump) jump
  - Media Library Jump, jump on the number of files or file - a feature
  - Resume playback feature
  - Slide show pictures with music background
- **Online features**
  - Network - 10/100 Mbps Ethernet - Samba Streaming MAX 26Mbps / 36Mbps NFS
  - Optional Wi-Fi (802.11b/g/n)
  - Speed streaming G router - 12Mbps Samba - NFS 18 Mbps @ 1m - unprotected
  - Streaming speed N router - 14Mbps Samba - NFS 22 Mbps @ 1m - unprotected (Average MKV 720p plays 10Mbps, the maximum FF / RW 15Mbps)
  - Samba server - U.S. skladištjenje data
  - Audio / Video streaming via UPnP Media Server (CNN, FOX, etc are enabled via the optional programs such as PlayOne, Tversity etc)
  - Internet Radio (SHOUTcast)
  - Kopiranje files - Card, USB, HDD and Network
  - Supported formats subtitles (Subtitle): SRT, SSA, SUB, SMI format

**Dimensions:** width x height x depth: 230 x 170 x 65 mm

### *Installed and the upcoming firmware 1.3*

Mede8er came installed *firmwareom-1.2.2*

Features that will be included in v1.3

- a) Directories will be able to lock with password
- b) bookmark
- c) search the Library (Library Search)
- d) Youtube and Internet streaming
- e) BD ISO (a feature that you can not wait to try)
- f) improving the SDK (codec and subtitles)

- g) FTP access
- h) a better audio player interface and functionality

Here we hope to Realtek, in the meantime get a license for HD audio algorithms and that they will be added in 1.3 firmware.

## **Design and content packaging**



When it comes to design, Mede8er is certainly one of the most attractive player on the market. Grille design has Piano but only at the top, while the rest is made of a mat in style, so do not worry that it will remain fingerprints or dust on the surface. Buttons are integrated into the front panel controls and allow Mede8er without a remote control, including navigation list, play, stop, pause, and TV-Out option.

## **Complete Package Contents:**

- Mede8er - MED500X
- RC + AC Adapter
- Remote Control + 2 x AA batteries
- Bag transfer
- Cables - AV, HD HDMI, USB, Components, USB extension cable
- Printed instructions

## **Processor**



At the beginning we would like to say a couple of features on the processor that is in MED500X player. Mede8er is equipped with Realtek's RTD1073DD Full-HD Digital Media Processor, which took victory in the 'EDN China Innovation Award 2009'.

Hsinchu, Taiwan - 18 November 2009-Realtek Semiconductor Corp. (Taiwan Stock Exchange: 2379.TW), one of the world's leading provider of multimedia and network IC provider, today announced that its RTD1073DD Full-HD Digital Media Processor has been awarded "EDN China Innovation Award 2009".

EDN China is the leading online community and online destination for Chinese electronics and engineering industries, was the first magazine that focused on the design of electronics to China. Products are evaluated and selected by "EDN China" judges, comprised of experts

from top companies electronic industry, academic institutes, universities .. Individual readers of EDN China were also invited to vote for their favorite products.

"This recognition of Realtek's RTD1073 Full-HD Digital Media Processor underlines our position as a provider of superior technology services to more fields. RTD1073 offers high performance play AV formats, including all standard Internet formats, said Realtekov executive director Jessy Chen. "This flexibility eliminates the frustration of end users, and the freedom necessary to enjoy the AV playback without having to deal with dekoderskim compatibility."

Realtekov RTD1073 represents the third generation of media processing technology and includes three main HD Specifications:

1. **BD HD:** Supports all three formats for encoding video and Blu-ray Disc. Currently they are, H.264, VC1, and MPEG2, with about 55%, 30% and 15% market share each. RTD1073 supports 1.25x 1080P HD decoding, provided that the decoding capabilities provide superior quality viewing pleasure.
2. **RMVB HD Support:** RMVB (RealMedia Variable Bitrate) is a multimedia format / container developed by RealNetworks's. Widely used in Asia and the Chinese market, RMVB playback is raised to 720p (1280 \* 720).
3. **Full HD:** Provides 1080 @ 60p, 32-bit HD OSD, advanced DNR (Digital Noise Reduction), MADI (Motion Adaptive De-interlacing), Multi-Tap Scaling filter to ensure that RTD1073 image quality matches the quality of Full HD TV.

This is very important because, as you see in the review, image quality was perfect!

RTD1073 integrated HDMI 1.3, USB2.0 Host and Device, SATA, Fast Ethernet MAC and PHY, 12-bit video DAC, and digital audio output. Supports Wireless LAN IEEE 802.11b/g/n in-house total solution and a rich set of network protocols - Internet for the development of advanced features. RTD1073 simplifies design and reduces costs through the NAND-boot features, and comes in 256-pin LQFP 'Green' packages.

So, Mede8er has a very flexible and powerful processor to run and manage HD 1080p content, which is very important, as you'll see when the presentation premotavanja MKV and other HD content, where all competitors languishing.

## Connections



On the right side of the integrated 2 USB ports, an SD card slot and USB for connecting slave Mede8er at a PC.



At the rear of the unit is visible fan, however, the unit does not produce noise or close to those created by competitive models. S-om Mede8er see how much is invested attention to noise level was reduced to almost the silent. The fan is not audible from a distance, so this is really great. There is also optical and coaxial audio connections, as well as composite, component and HDMI 1.3 ulazimi / izlazimi. 10/100 Network is there to take care of all your needs for network sharing and *streaming* .



Everything is very well done, although we would like to see a USB port on the front for easier access.



Wi-Fi module is out of the package, but it can optionally available

### Connectors on the right:

- SD card slot,
- 2 USB ports and
- USB slave to connect to a PC Mede8er

### On the back are the following ports:

- 1x HDMI (v1.3) exit
- 1x component output
- 1x composite output
- 1x Optical Output
- 1x Coaxial output
- 1x Ethernet port
- 1x input voltage DC-IN

### Remote control



Remote control is another story. Namely, it is ergonomically well designed for the less than competitive solutions, so everything is within easy reach of your fingers. Central control button is definitely a small circle between the arrows is "multifunctional solution, odrađeno a way to shame not only competition between MKV players, but many manufacturers of TV sets.





In fact, when you start the movie or you want to navigate through izbornikee this button is programmed to literally works intuitively, without having to look where it is located on the remote control, and depending on the situation, replacing komadne such as, "play" "pause" "stop", "OK", etc.

## The interface, menus



The interface is odrađeno style Realtek product, and that could be bought in the EU in the USA, but not with us so all users will be this paper. The interface is odrađeno in 1080p resolution, regardless of where the menu are.



Here it is important to note that there *movie preview* mode, and that the right directory literally starts the film in a small window when the file mark of the film. Very, very good odrađeno and these features would prefer to see in similar products.



Near *movie preview*-and there is a *picture preview* that the image of the film loaded in the directory and file info on the film. On previous similar devices, you must install and create a variety of other scripts, such as the Popcorn YAMJ applications, while the Mede8er is already built to be *user-friendly*.

Otherwise, the search itself and move through the menu is very easy and intuitive, especially with the equivalent programmed remote control.

Mede8er is one of the rare player who is able to handle with 2 TB internal hard disks. Consequently, the integrated matching "Copy" with a mechanism where multiple disks and location can also choose to transfer files (movies, pictures, music) to other locations.

**Devices used for testing (hardware and software, DVD and BR discs / movies)**



### Hardware:

1. Panasonic TX-P50V10E
2. Denon AVR-2310 AV-receiver
3. Panasonic BD60 - Blu-ray player
4. PlayStation 3 - game console
5. Mede8er MED500X MKV Player
6. Laptop / PC / HTPC
7. Wattmetar for consumption mjernje TV
8. High-speed digital camera Casio Exilum F1
9. Logitech 885 Remote Control Unviersalni
10. HDMI cables and DVI-VGA adapter for CRT monitors.

### Software:

1. HCFR ver 2.1
2. HCFR DVD samples
3. AVCHD - v13 Test Patterns for Blu-ray players
4. FPD Benchmark for professionals
5. Silicon Optix HQV Benchmark Blu-ray

### Movies:

1. Terminator Salvation Blu-ray 1080p
2. Video Blu-ray 1080p
3. Terminator Salvation 720p MKV
4. Video MKV 720p
5. Star Wars: Revenge of the Sith HDTV - 720p MKV
6. Star Wars: Revenge of the Sith DVD 480p
7. Dolby TrueHD.m2ts 1080i
8. Master.m2ts DTS HD 1080i

## Results of tests of electronics (HQV benchmark)



How we tested, our Silicon Optix test, we benchmark the HDD and copy the m2ts file as we have started to Mede8er-in.

<b>Overscanning to HDMI</b>	0% when the active 1:1 overlapping pixels (can adjust image height and width)
<b>Uniformity of the screen</b>	Excellent
<b>Sharpness</b>	Excellent at 1:1 pixel mapping
<b>Remove digital noise</b>	Excellent
<b>Nazubljenost line</b>	Missing
<b>Posterizacija</b>	Missing
<b>1080p/24</b>	Accepts 1080p/24 video signal, without the recoil of the film

### *Consumption*



<b>Consumption of HD material, calibrated</b>	<b>10 W</b> Tolerance $\pm 1$ W
<b>Standby</b>	<1W

### *Warming*



<b>The temperature of the panel (bottom, center, the upper part of the screen)</b>	23°, 22.4°, 25°
<b>The temperature in the upper part</b>	max. 25
<b>Room temperature</b>	22.5°

## Picture quality

MKV DivX AVC HD MP3 xvid HDJPG TS MPEG AVI AAC m2ts MP4 H264 flac dts

### Blu-ray (.M2ts)



After the HQV tests we conducted, it was clearly shown that the material be flawless, so we are more focused on playing different formats, whether there is a flicker, artifacts, bugs in the player, etc.



m2ts movies are streamali the network and run to the hard drive and portable USB stick with no problems, zastajkivanja and anomalies. Ocjena 5 / 5. Here is clearly seen Realtekovog chip power and legitimacy of the Chinese Association Award for electronics.

Also, look forward to the possibility of reading Blu-Ray ISO files, which will be provided with *firmware*-om 1.3.

### Movies MKV (1080p)



The most popular format is performed without any difficulty, what surprised us was the fact with some ease Mede8er Rewinding 1080p material, there are options of 1x over 1.5x, 2x, 4x, 8x, 16x and 32x acceleration. Neither one of these there has been no acceleration zastajkivanja or the appearance of artifacts like products with Sigma 8635 chip (the first WD HDTV, Popcorn Hour A series) where playback 1080p content depends on a variable bitrate

(VBR), which is higher VBR were higher problems for a single player - comes to the appearance of shooting pictures, artifacts and zastajkivanja but not a Mede8er. Impressive.



#### *Movies MKV (720p)*



720p MKV running standard well, the picture is sharp, clean and pure forest and nazubljenosti as is the case, and the 1080p version. Is a real pleasure to run movies and jump from the scene or the scene with 12 nminute to the middle or the end of the film with *jump* functions.

If you know of any artifacts speak, run any 720p or 1080p mkv movie through VLC player and click on the time bar (premotajte film somewhere in the middle) - to see what the artifacts.



## Sound quality

Mede8er owns Dynamic range control (Night Mode) option. Allows you to customize audio playback to reduce peak volume levels (loud surprises) while experiencing all the details in *soundtrack*, Which allows a late-night review of high-energy surround sound without disturbing others.

On the other hand, we tested the sound only in digital form via an HDMI cable, and the sound I was in charge of our test Denon AV receiver. What is important is that the DTS and Dolby Digital audio bitstream properly.



## DTS



In addition to what is able to decode DTS 5.1 soundtracks, Mede8er is able to refer them to your AV receiver to decode.

## Dolby Digital



The same thing is Dolby Digital 5.1 encoding system, Mede8er were able to independently decode and forward them or AV receiver to decode.

## DTS HD Master

*- (Without waiting for reviews, firmware 1.3)*

Some would say that is a real shame that HD audio algorithms are supported with izlaksom this player, but we'll explain the situation. Namely, the Realtek HD dekoding not support DTS HD Master algorithm in its 1703DD processor. This processor has a power very much for the simultaneous decoding of HD video and audio, so it is only a matter of days or *firmware*-and when will be able to decode or Mede8er *bitstreamingom* sent to the AV receiver DTS HD Master Audio 5.1 and 7.1 audio.

Furthermore, unless you look m2ts content that is definitely copied in most cases (not ripani) Blu-ray movie to hard disk, you have no need for HD sound, because 95% of the MKV movie has AC3, DTS or Dolby Digital 5.1 compressed audio.

So the lack of definition of algorithms here, we can not assess or evaluate, because on the one hand for them to MKV players almost no requirements, while the other can be easily added through one of the next version *firmwarea* as was the case with 2:30 *firmware*-om PlayStation 3 console.

We are waiting for the Realtek within its SDK and issue a license for HD audio algorithms and blue light on Denon flashes!

## Dolby True HD

*- (Without waiting for reviews, firmware 1.3)*

Everything we have said for DTS HD Master, goes for the Dolby TrueHD.

## Subtitles (subtitles)





Subtitles excellent work, there is support for Unicode UTP-8, Central European, Western, etc. The only two characters that could not be seen as "C" and "C" on some titles. **(always use a text encoding "Central European")**

Subtitles can be reduced and increased by your desire, very useful feature. Today and a lot more expensive devices are able to increase the font size that many users will be deducted from such models.

### *Section image and music*



Images list in the form *slideshow*-a (if I have to choose in the settings) with dynamic cross, is also optional.> Playing music can play from the list until you can continue listening to your mp3 or flac favorite thing in the background, continuing with this view.

Some of the ID3 tag information is displayed on the screen where it usually shows pregled. Ono thing missing is that the albums are displayed on files. You can mix music and images together by placing the music within the image folder or start the music before you start playing the slideshow. Display time performance and the image display are more than excellent. The ability to use music and images with *slideshow* effects that are integrated to make it all look a lot zanimljivije. Rotacija image is done with the arrow ...

### *Working in a network - Networking*



Working in the network was a real pleasure, regardless of whether it is a aktiviranju NAS or Samba servers that are essentially identical, with a different bandwidth. Through UPnP options can be easily streamati YouTube or other services over the Internet while shopping with a special Wi-Fi module, you can start streaming with Wi-Fi network.

We connect the cable modem Mede8er working on the DHCP protocol, so there was no need to configure any form of connection. First we tried the "Internet radio", which is all pretražuje Internet radio providers, which can be sorted by genre and sort the favorites. A video in a separate section of reviews.

### *Power Consumption*



Only 10W, regardless of whether it plays 1080p movies or listening to music, this is the result of a 1080p interface (interface).

### **Video Demonstration**

View All Mede8er sites, jump functions, and start m2ts mkv file and subtitle, zoom functions and info you can see in the video that we saved for you:



## Conclusion

There is no doubt that Mede8er out of the blue become a dangerous competitor any MKV player currently available on the market. We are literally thrilled completed this review. Methods of integration of hardware, optimizing itself 1080p intuitive interface, the possibility of mounting internal 2 TB disk, the ability *jump* function in both the movie and music reproduction and for searching files. Samba and Wi-Fi streaming and support. M2ts files we were left without a word.

Of course, all this would not mean much to the picture quality is not on the level, but this is not the case here. 1080p content is carried out with such ease that it is fast and easier than on the same PC, no recoil, zastajkivanja and artifacts, as so many names zvučnija fight.

The addition of HD audio support in the form of DTS HD Master and Dolby TrueHD-and, even if only *bypass*, To send the same AV receiver for processing, and support site where users can only wish and imagination to rearrange I interface, Mede8er to become the most complete solution on the market.

At this point, this device has the best optimization of reproducing 720p and 1080p content for almost half the price of the competition.

Primarily we think the Popcorn Hour A-100 and A-110 that uses Sigma 8635 chipset, where playback 1080p content depends on a variable bitrate VBR, which is a film experience but unacceptable. To analyze, the newer 8655 which is built into WD TV Live players and Sigma 8643, which is part of the Popcorn Hour C-200. Sigma 8655 does not support Blu-ray ISO file. This is a great undertaking, and many would be happy just with the possibility of BDMV files. If read ISO files Blu-ray stable, took off his hat guys from Sanji's Electronics.

In addition to Blu-ray ISO file, there are many more Codecs and containers which are to be derivative of HD format with higher compression, which is for devices based on the Sigma chip impossible task when it comes to smooth playback. This is why we wrote in the introduction to the review Realtetekov 1073DD chipset. This chipset, which is no problem with any version of internal software can read any format / codec / container, while the competition is not capable. This is a fact that mede8eru and proizvodimabaziranim the Realtek chips allows flexibility and durability as well as market and marketing success.

Finally, there is a factor dobavljivosti, which is satisfactory because Mede8er procurable with free delivery to the Republic of Croatia and Bosnia, as we mentioned earlier.

Remains to say that Mede8er, multimedia center, rather than just an ordinary MKV player who will no doubt take the popularity of all available similar devices, not only because of the possibility but also because of the price.

For this reason Mede8er deserves our unreserved recommendation and becomes part of our test equipment.



### Key Benefits

- **Realtek 1703DD processor integration**
- **Phenomenal display 720p 1080p mkv, m2ts and all other supported formats**
- **Fast, premotavanja forward and backward without recoil or creating artifacts**
- **The possibility of jumping (jump) at a specific minute video**
- **The possibility of jumping (jump) function for folders and files in the Interface**
- **Excellent DD and DTS 5.1 audio**
- **Excellent noise reduction nazubljenosti**
- **Regular display 24p signal**
- **Very good interface with 1080p preview mode**
- **The possibility of reading files from USB sticks**
- **Possibility of integrating the internal hard drive up to 2TB**
- **Samba and NAS capabilities**
- **Ethernet and Wirelesstreaming**
- **Low fuel and heating**
- **Silent cooler**
- **Excellent connectivity**
- **Extremely easy to use remote control**
- **Excellent bundle (Bag, HDMI cables)**
- **Design**
- **Charge**

### Key disadvantages

- **Lack of support for DTS HD Master and Dolby TrueHD audio**
- **No possibility of creating a custom interface**
- **Not the existence of a shortcut - shortcut**
- **Do not display the character "f" and "C" with subtitles on some movies (always use a text encoding "Central European")**
- **Remote control has no backlight illumination**

Overall rating: 

**Note:** For all the shortcomings, except those listed for the backlighting of the remote control, wait for 1.3 firmware. Custom interface views is possible to make films using the TVIX applications: