

MEDIA ON DEMAND SYSTEM



FUNTORO™
MSI Corporation

MOLPIR



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Thank you for buying FUNTORO MOD system. We strongly believe this system will reliably serve you and will provide the best comfort to your passengers.

Please read this User Manual completely before operating the MOD system and keep it in a safe place for future reference. You may use it in the case of some troubles during MOD system use.



There are no user serviceable parts which could be repaired by the user inside of individual components of MOD system. In the event of failure please contact authorized repair service centre.

WARNING: MOD system is installed and handed over to the user without the media content which is under copyright of the owners / authors / performers of film and musical works, photographs or other multimedia content.

The system operator is responsible for paying the proper licenses / fees for a public screening of media content subject to protection of intellectual property rights associated with the operation of MOD system.

CE and FCC certification:

This equipment has been tested and complies with respective EC directives and to standards of Class B of digital devices, pursuant to FCC rules, Part 15. These directives and standards were designed to provide reasonable protection against harmful interference (EMC) in the means of transportation and for health and safety protection of the passengers.

To ensure continuous compliance with EC directives and FCC standards, do not make any interventions to the individual components of the MOD system or changes in its installation.

RECOMMENDATION: to clean the monitors, use only products designed for cleaning of LCD monitors. Never use solvents, detergents or abrasive cleaners.

FUNTORO MOD system is designed for vehicles with 12V and 24V board voltage (supply voltage operating range 9 ~ 36 V).



The gradual depletion of the vehicle battery under 10V when the MOD system is in operation may cause an emergency condition.

Use the MOD system only when the vehicle engine is running. If necessary to operate MOD system with the engine stopped, make sure sufficient capacity battery. Power consumption of MOD system in basic configuration with 54 monitors is about 21A at 24V.

WARNING: It is possible that your installation can differ from that one described in this User Manual. As some of the HW accessories might not be installed on your device or some of the system functions can be inactive.



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Introduction

Media On Demand (MOD) is modern fully digital system which allows every passenger to watch program fully independently on the other passengers. Passenger can choose from the wide selection of movies, music and pictures stored in Solid State Disk (SSD) in system server. System control is intuitive and very simple directly on the touched screen. System has quick response on passengers' requests and enables to pause, forward / backward rewind of selected media content or to simply choose another title. MOD system can be extended by AV inputs like live DVB-T, satellite TV programs, navigation system or front view camera or any other source of composite AV signal.



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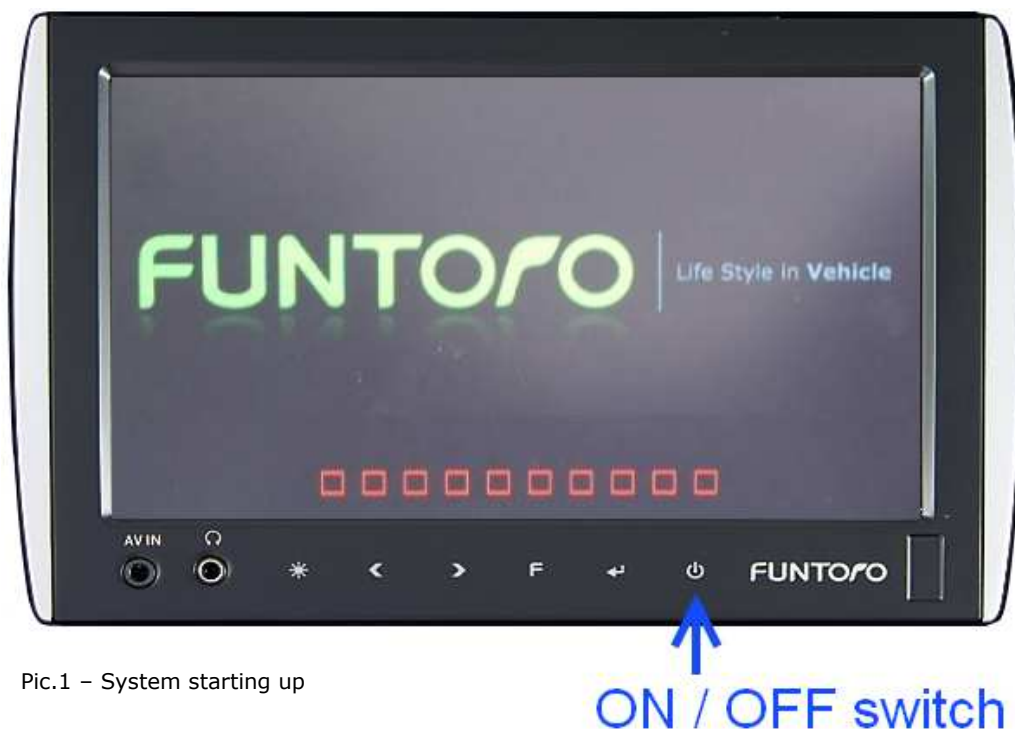
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1. Start of the system

MOD system is powered from on-board vehicle network (permanent supply) and turns ON by getting the ignition ON signal (ACC ON). According to individual installation it is possible to use also manual switch to supply voltage ACC ON, in such case MOD system turns ON just after that switch is turned ON.

After switching system ON the MOD server turns ON and after booting the system all monitors loads operating system from the server. This process takes 3 to 5 minutes. While starting up the MOD server on all monitors is showed manufacturer's logo(pic.1) and there are shown red squares in the bottom line of the monitor. When the monitor loads operating system red squares on bottom line are filled by yellow indicating the progress. After full initialisation of the monitor LCD display is switched OFF and ON/OFF button is lit by red LED backlight. In this state the monitor is ready for the use.



Pic.1 – System starting up

2. Device control

MOD is fully digital system which allows intuitive and easy control of the system and selection of requested media content directly on the touch screen. Each monitor has headphone jack for listening to the sound of the multimedia content.

2.1. Turn on/off

After system initialization (it's usually done before passengers enter the vehicle) the monitor is dark and only ON/OFF button is illuminated red. While short pressed the ON/OFF button on the monitor, it turns ON and introduction video is played automatically (if applicable). Introduction video can't be stopped and after the introduction video finishes, main menu shows on the monitor.





Pic.2 – Main menu of the system




Buttons on the bottom of the monitor are keyless so it is not necessary to push them hard, it is enough to touch them by the finger. Only lit buttons are active in the every moment!



WARNING: After turning off the MOD system with the main switch on the dashboard it is required to wait 1 minute before repeated turning on. This is important for system to normally to end its operation. Not complying of this policy may cause unexpected behavior.

2.2. Headphones

Sound of multimedia content is played in headphones. Insert headphones connector to monitor socket marked by  sign. Put headphones on your head and adjust the volume level (see part 2.4.)

2.3. Display angle setting

Each monitor can be individually set to the angle suitable for the passenger depending on seat tilt and passenger's height. Put your fingers to the hole under the monitor and set requested angle by pull it up. When you stop to watch the multimedia content, please put monitor back to the previous position.



Pic.3 – Monitors viewing angle setting



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2.4. Volume and brightness setting

Volume and brightness can be set directly on the monitor individually. Volume can be set by pressing the button > for volume up and < for volume down. Brightness can be set by press and hold of the button ☀ until brightness is set to desired level.

Warning: Brightness is set in the cycle from the lowest to the top level. When requested brightness is achieved please release the button.



Pic.4 – Volume and brightness setting

2.5. Media content playback control via touch screen

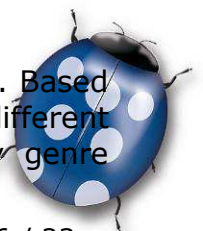
Each passenger controls the MOD system individually and can choose between movies, music, pictures, TV channel or Navigation (if available) easily by clicking the appropriate icon on the monitor. Chosen icon will change the colour and then system accepts your request. Most of the menu screens have multi level option (for example for movies you can choose according to language, genre or similarly by interpret, album or track for the music). Individual menus or system functions have different control elements. For example: if you touch the screen while playing movie there will be control icons you can choose from shown on the right side of the screen. You can always go back one step or go back to main menu directly and active control elements for given functionality. You can pause the movie, move forward or backward and also choose another movie. More detail description on each different function is given in section 3. Displaying of the touch controls on the screen is context-oriented (always depends on the particular state of the system / chosen function of the system) and after a certain time of the user inactivity will be automatically erased.

3. Functions (user view)

Main menu is shown after the monitor is turned ON and introduction video is finished. By pressing the icon on the touch-screen, system will show chosen function or will move to another level of the menu.

3.1. Movies

While selecting the Movie option, the list of available movies will be displayed. Based on the number of offered movie titles, the movie list can be organized by different criteria using folders and subfolders structure. Movies are usually sorted by genre



(comedy, thriller, crime, animated, ...) or by language if MOD system is used by passengers speaking different languages. It is important to understand, that it is not possible to choose the language version, as it is usual for DVD players during the movie start, but language version is chosen by selecting the movie with relevant language version. It means if the movie have to be available for example in English, German and Slovak languages version, then this movie must be stored on the SDD disc in 3 times, always with desired language. For easier choice of the movie from the list there is a graphic interface connecting movie name with graphic icon. These icons are generated automatically by the system during UI Generator session while preparing multimedia content.

By choosing movie icon on the touch screen the movie is started. According to system set-up, it is possible to start short commercial spot before selected movie. While the commercial spot is running, the control of MOD system by the user is temporally disabled, what means that the commercial spot is not possible to pause or skip. Complete system control on the screen by the user is automatically restored after the finish of the commercial. While the movie is running touching the screen in any place shows control buttons on the right side of the screen. It is possible to pause the movie, to wind the movie back / forward, to stop the movie with return back one level, to move directly to previous / next movie in the list or come back directly to the main menu. Control buttons are shown on the right side of the touch-screen



Pic.5 – Movie option – movie selection



Pic.6 Movie option – movie playback control

NOTICE: In the case of using movie rewind backward or forward option, it is necessary to wait until time bar disappear automatically (or push "F" on the keyless for its immediate disappear) before other control function can be used.



All movies used in FUNTORO MOD system must be stored in **.avi** format according to the specification shown in Section 10.1 of this manual.

3.2. Music

By choosing the music option, the list of available albums / songs is displayed. Based on the number of titles in the list the titles list can be organised by different criteria using folders and subfolders structure. Usually, songs (music titles) are sorted by genre (Pop, Rock, Classic, Country, ...). Suggested structure is Interpret – Album – Song. During music playback pictures stored on SSD disk are shown in slide show, however, user can any time stop pictures slide show.

During music playback touching any place of the screen will show control buttons on the right side of the screen. It is possible to pause the music and to start it again, to stop pictures slide show (night mode), move directly to previous / next title and to come back to the main menu.

Control buttons are shown on the right side of the touch-screen



Pic.7 – Music option – selection of the title (song) from the list



Pic.8 – Music option – music playback control

All music titles (songs) stored on MOD system must be in **MP3** format according to the specification in point 10.2 of this manual.

3.3. Pictures

By choosing the Pictures option, the list of available pictures is shown. Based on the number of pictures in the list the pictures can be organised by different criteria using folders and subfolders structure. Usually, pictures are ordered by the place of creation,



event, or genre. During pictures slide show touching any place of the screen will show control buttons on the right side of the screen. It is possible to pause the slide show and to start it again, to move directly to previous / next picture and to come back to the main menu.

Control buttons are shown on the right side of the touch-screen



Pic.9 – Pictures option – selection of picture from the list



Pic.10 – Pictures option – picture slide show control

All pictures stored in FUNTORO MOD system must be stored in jpg format in resolution 800 x 480 pixels.

3.4. Games / AV In

By selecting Games / AV function, the external AV inputs on the individual monitor will be activated and composite AV signal is shown on the monitor. This option can be used for connecting a game pad with an AV output, or to play composite AV signal on the individual MOD monitor (for example watching the camera view, MP4 player, etc.). In the mode of external AV signal playback, the touch screen function is disabled and monitor is just a "monitor" of connected device. By connecting a game pad, the user is able to play games stored in the game pad and use the monitor viewing the game. The game is controlled by the game pad.

If the AV input is not connected to the AV signal, the monitor will appear the message "No signal". Normally MOD monitor has 2 AV inputs - one on the monitor front panel marked as AV (3,5mm connector) while the second one is on the back side of the monitor (it is not designated for the standard user).

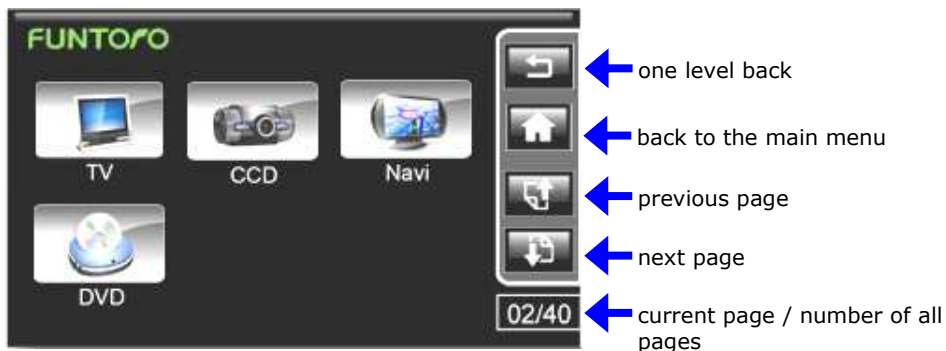


3.5. AV inputs (Capture box)

Besides the multimedia content stored on SSD disk of MOD server it is possible to extend the system with AV inputs module. This offers live broadcasting of AV composite signals. Usually it is used for the live broadcasting signal from on board cameras, navigation unit and television. Based on system configuration it is possible to offer up to 16 different AV inputs. When watching some of the AV inputs, the user does not have a control of the AV input on his monitor and is just a passive viewer of the broadcasted content (for example by watching the TV, the user can only select from the list of already tuned channels, but has no possibility to tune a different channel/program). Based on the type and the number of connected AV inputs the graphic interface (menu) is designed. The control on the touch screen is reduced only for selection of desired AV inputs and there is no active control of the content available (pause/play or move back/forward).

The design of the AV input menu is related to the system installation and the number of connected AV inputs in MOD system. Usually, MOD systems can be equipped with front view camera, navigation system and television. DVB-T (terrestrial digital television) programs as well as satellite television programs are often available. The quality of TV programmes depends on the quality of received signal in respective area / territory. This is especially important for satellite television, where the satellite antenna needs to have a direct view on the satellite. The worst SAT TV signal reception is in urban areas (buildings are obstacle for SAT signal reception), mountains areas and on the roads with tree lines on the sides. On the highway roads, the signal quality is normally good. The bridges above the highways cause only short signal drop-outs. The coach speed has no influence on receiving satellite TV signal. At a higher speed, the signal is even better.

Control buttons are shown on the right side of the touch-screen



Pic.11 – TV/AV option – AV source selection





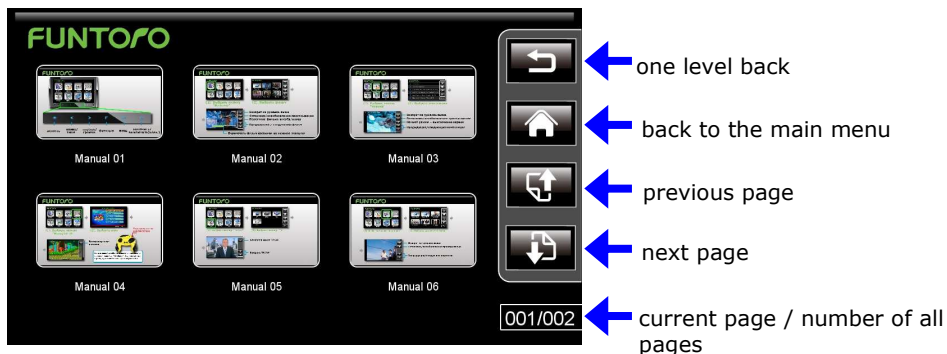
Pic.12 – TV/AV input option – AV live broadcast control

Due to used technology for analogue AV inputs conversion to digital format and its distribution to individual users there are time shifts in receiving digital signal to the users (the time difference can be up to several seconds). Its obvious for example when watching the same AV input on neighbouring monitors - there can be time difference up to few seconds).

This is normal situation and it is not the system defect. The synchronization between shown image and the sound on each individual monitor is always perfect.

3.6. Manual

MOD system offers on-line user manual with basic instructions how to use MOD system. On the screen are showed icons describing individual system functions. By selecting individual icon related function description is shown on the whole screen.



Pic.13 – Manual option – AV source choosing



Pic.14 – TV/AV input option – AV live broadcast control



4. Introduction video

After switching ON the monitor, before the main menu appears, it will start to play introduction video (based on system set-up). During the intro video playback the MOD system control by the passenger is temporally disabled. That means, intro video is not possible to stop or skip. System control by the user on the screen is automatically restored after the intro video is finished and the main menu of the MOD system will appear.

For introduction video can be used safety instructions, coach operator presentation, trip destination introduction or any other commercial spot. MOD system administrator can in any time to change the intro video without necessity to run UI Generator again. However, it is necessary to maintain file format, name and the placement in the special folder of the SDD disc. There are no technical limits for length of intro video, but it is necessary to consider the proper length because intro video can't be skipped or stopped.

Intro video in FUNTORO MOD system must be stored under the name **intro.avi** and must be stored in the format according to the specifications listed in Section 10.1 of this manual.

5. Commercial spots / flash messages

In the MOD system, it is possible to enable / disable automatic playback of the commercials (advertisement spots) or text messages (text in the forefront of the actual MOD content). Usually, the advertisement will be broadcasted before the movie starts and/or in pre-set time interval (for example each 30 minutes). If there are more than 1 advertisement files stored in SSD, MOD system will continuously change different advertisements at the beginning of the movie. There is no limit for number of commercials. The commercials must be stored in the same format as the movies (XviD Movie (*.avi), resolution 720 x 480, Bit rate 1.2 Mbps, Full Zoom, Frame Rate \leq 29.97 FPS; Audio format stereo MP3, Bit rate 128 Kbps, Sample Rate 48 kHz).

Similar rules apply also for text messages (the flowing text) viewed on the top side of the screen. Text messages are stored as simple texts with file extension **.txt** in folder **Ad / Text**.

Notice: After loading new commercials into the system, it is not necessary to run UI Script generator.

6. Public announcement of driver / guide

MOD system has driver/guide announcement function available. When the driver or guide switch on the microphone, all contents playback on all monitors will be paused and the announcement will be broadcasted through audio system of the coach or via headphones used (depending on system installation). After switching off the microphone, all contents continue from the point where it was interrupted. Connected AV inputs continue broadcasting but the picture is not shown on MOD monitors during Public Announcement message.

Notice: Pausing and restoring multimedia content and live AV inputs playback can have few seconds time difference on individual monitors. This is caused by used



technology of analogue AV inputs conversion to digital format and its distribution to individual users (the time difference can be up to several seconds). This is normal situation and it is not the system defect.

7. LAST GOOD Function



By switching OFF the whole system or only individual monitor, the content playback will restart from the point where it was paused during next switch ON. If you are watching a movie before switching off, the monitor will start the introduction video first and then continue the movie from the point lastly seen before switching OFF. In the case of listening to the music before switching off, the song will continue from the point where you switched the monitor off when switch it ON again. System will behave in the same way for pictures slide show or by other functions. The only exception is for all AV inputs (TV broadcast, radio, cameras, navigation, ...) where a part is "lost" during system OFF and it is not possible to return back to such portions of visual information.

8. DUAL BOOT Function and AUTO RECOVERY for increasing system reliability



DUAL BOOT is system function designed for automatic start of the system in the case it is not possible (due to any reason) to start the system by standard procedure.



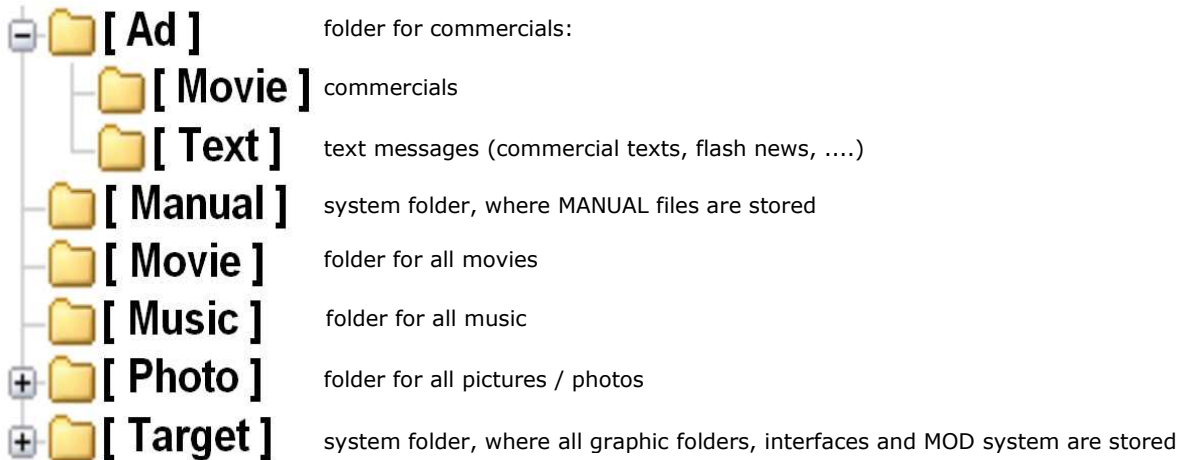
AUTO RECOVERY is system function designed for automatic and continuous check of the system operation and in the case serious problem is detected the whole system will restart to recover normal operation.

9. SSD disc structure

MOD system has multimedia content (movies, music and pictures) stored on SSD disc (Solid State Disc), which delivers high speed data reading and doesn't contain any moving parts. Besides multimedia content there is also stored the application (user interface) which means description how the system reacts on user's requests on SSD disc. For the proper operation of MOD system movies, music and pictures must be stored on designated location (folders) of the SSD disc. After placing multimedia content on SSD disc, the data conversion to required format for MOD system must be executed. For this is used UI Generator with relevant Profile, which includes graphic interface, all menu options and instructions for executing user controls.

There are 2 types of digital monitors for MOD system – 7" monitor with resolution 800 x 480 pixels and 10" monitor with resolution 1024 x 600 pixels. UI Generator creates individual graphic interfaces for 7" and 10" monitors. In the case there is used only one monitor type (usually 7" with resolution 800 x 480 pixels) then the profile can be modified to produce store on the SSD disc only files necessary for used type of the monitors.





Administrator of the MOD system can sort multimedia content to subfolders, based on different criteria and create subfolders structure suitable for the user.



The movie list can be organised for example by genre (Action, Comedy, Drama, Cartoon, ...) or by languages if movies are in different languages. The same way can be used for the music folder, where the subfolders can be organized by genre (Pop, Rock, Classic, Country, ...) and in the next level by the interpreter. System admin can change the structure of folders, but all movies must be stored directly in the movie folder or in its subfolders, all music must be stored directly in the Music folder or in its subfolders and all pictures must be stored directly in the Photo folder or in its subfolders.

The MOD system admin cannot rebuild functions of the system. System functionality is build up by the supplier by creating a specific profile for the user before system installation into the vehicle. The system admin can change the multimedia content on the SSD disc by storing of new movies, songs and pictures according to actual needs. However, after media content modification on SSD disc UI Generator must be used together with relevant Profile to create proper media content on SSD disc for specific MOD system.

Note: Based on function designed for specific MOD system the SSD disc structure can be changed to correspond with needs of the application.

To ensure the right functionality of the MOD system, it is not allowed to change content of folders **Target and Manual** on SSD disc and makes any change on delivered Profile for UI Script generator. In the case the graphic interface or MOD system functionality needs to be changed, please contact your MOD system supplier, who will arrange required changes.



Note: For one MOD system, admin can have prepared more SSD discs with different multi-media content. Then by simple change of SSD discs and re-starting the MOD server multimedia content and graphical interface can be changed within minutes to provide the right content for passengers in the vehicle.

10. Creation and administration of multi-media content

10.1. movies conversion to the appropriate MOD system format

All movies stored in MOD system FUNTORO must be stored in following format:

Video format:	XviD Movie (*.avi)
Resolution:	720 x 480
Bit Rate:	1.2 Mbps
Zoom:	Full
Frame Rate:	≤ 29.97 FPS
Audio format:	MP3
Bit Rate:	128 Kbps
Sample Rate:	48 000 Hz
Channels:	Stereo

10.2. music conversion to the appropriate MOD system format

All songs stored in MOD system FUNTORO must be stored in following format:

Audio format:	MP3
Bit Rate:	128 Kbps
Sample Rate:	48 000 Hz
Channels:	Stereo

10.3. pictures conversion to the appropriate MOD system format

All pictures/photos stored in MOD system FUNTORO must be stored in following format:

Format:	jpg
Resolution:	800 x 480

Notice: Even though photographs are stored in higher resolution, it does not have impact on the quality of viewed pictures. It only occupies more SSD space to store them and necessary conversion to the appropriate format slows down the pictures playback.

11. Copying the multimedia content (titles) onto SSD disc

After acquiring movies, music titles, pictures/photos, intro video or commercial advertisement spots please store them to appropriate folders on SSD disc. Remove SSD disk from the MOD server only when MOD server is switched OFF. Then connect SSD disc with standard USB connect cable (USB to mini USB) to the PC or notebook, where



the source files of movies, music, photos, intro video and commercial spots are stored. It is important to copy all movies in appropriate avi format into the **Movie** folder or to its subfolders. All music titles in MP3 format copy to **Music** folder or its subfolders and copy all photos in jpeg format to **Photo** folder or its subfolders.

12. UI Generator

UI Generator is a utility which makes SSD disc ready for use with FUNTORO MOD system. It creates icons representing all multimedia content (movies, music and pictures) stored on SSD disc and creates a copy of the application (xml files to control the whole system and its reactions on user's requests). UI Generator uses Profiles, in which description of relevant application is stored. For example, you can have a Profile suitable for young generation and another one for older passengers with different user interface. And of course there can be also different media content prepared for different target audience. After running UI Generator conversion of media disc do not modify SSD disc content except possible replacement of introduction video or commercials. Introduction video and commercials are managed by MOD system directly and thus do not need to have corresponding icons for their start by the user. Introduction video replacement is described in Chapter 13 of this manual and commercials replacement is described in Chapter 14 of this manual.



Please note that the **Profile** contains all necessary information for each specific customer & installation and therefore it is provided by FUNTORO MOD system manufacturer / content service organisation. **Customer himself is not allowed to make any modification to the Profile.**

Install UI Generator from CD disc or from USB stick on your computer by starting enclosed program **setup.exe**. UI Generator installation wizard will guide you through installation procedure:



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ISO 9001

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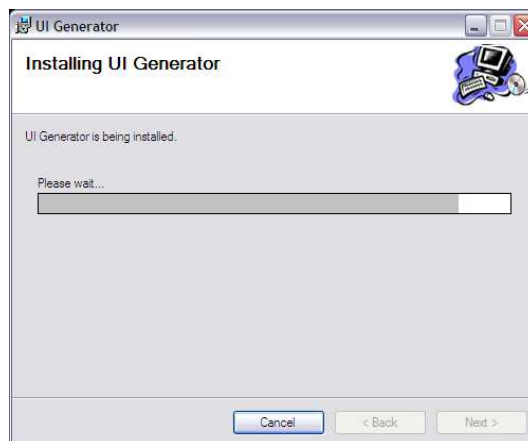
Please press **Next** to start UI Generator procedure. Every owner of MOD system is entitled to use UI Generator for conversion of SSD disk to be used with MOD system.



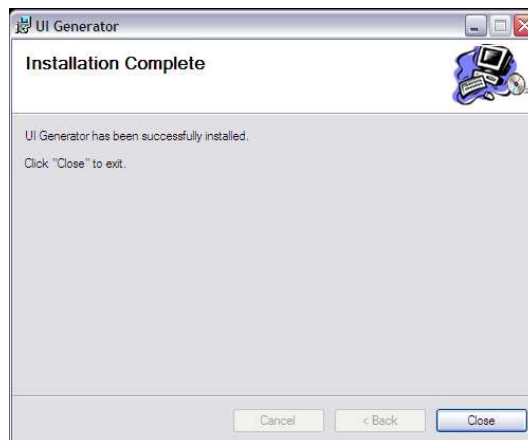
Please confirm suggested location for UI Generator by pressing **Next** button.




Please confirm start of UI Generator installation by pressing **Next** button.

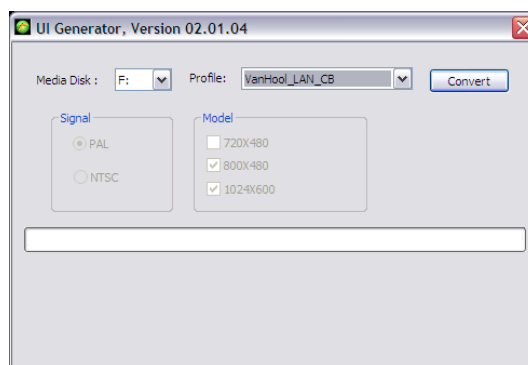


Progress of UI Generator installation is shown, please wait until it is finished, then press **Close** button to finish whole installation process.

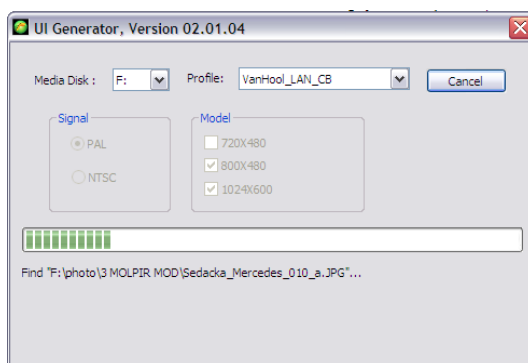


UI Generator installation is finished with creating program Icon  on your computer desktop, you can start UI Generator by mouse double click on it.

UI Generator will open dialog window and prompts to choose media disk and desired profile:



Please confirm given Media disk and Profile or choose another Profile according your request (if such option is available) and then press **Convert** button. UI Generator starts to convert connected media disk to required format based on chosen Profile information. This process can take 15 to 30 minutes for 64 GB SSD disc depending on used disc space and chosen Profile. Information Signal and Model is just for your information and these fields are not accessible, they are depending on current Profile used for creating media disk. Conversion progress is shown in the progress bar in the middle of this dialog window and actual activity (file processed) is shown just beneath of progress bar.



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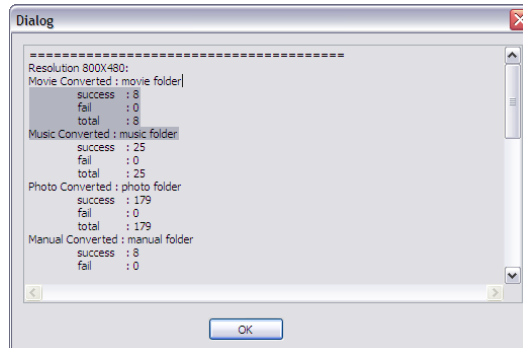
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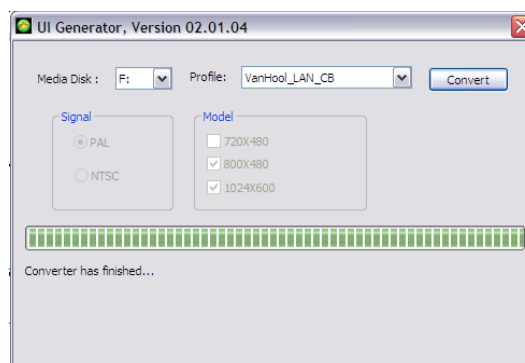
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When media disk conversion is finished UI Generator gives the report of files conversion result, please check if all media files were converted successfully by scrolling whole report by the ruler on the right side of Dialog window:



If there is no problem with files conversion please press **OK**. Then UI Generator finishes the conversion process by giving the message: **Converter has finished ...** Close UI Generator window by pressing  in the right upper corner of the UI Generator window.



If there is reported some conversion problem please check relevant file on SSD disc if it has correct format or is not other way damaged and then run UI Generator again. If the problem with some specific file remains please remove that file or replace it by new correct copy and run UI Generator.

Note: You can run UI Generator on the same SSD disk any time, but be sure the whole conversion process is entirely finished before closing UI Generator session, otherwise MOD system may not work properly.



Please note that the **Profile name** can contain maximum 28 characters, do not use longer profile names, please.

13. Introduction video change in functional system

Introduction video is normally a part of customer specific Profile but it may be necessary to replace introduction video on your ready MOD system from time to time. For this modification is not needed to run UI Generator conversion of media disc



because introduction video is managed by MOD system directly and thus has no corresponding icon for its start by the user. Just simply replace Intro.avi file by its new version in its original location (normally F:\target\share\800X480\ui\intro.avi for MOD system with 7" monitors and F:\target\share\1024x600\ui\intro.avi for MOD system with 10" monitors).

Please keep in mind Intro.avi file must have format in accordance with specification for MOD movies (see chapter 10.1).

14. Commercials change in functional system

It may be necessary to replace commercials on your ready MOD system from time to time. For this modification is not needed to run UI Generator conversion of media disc because commercials are managed by MOD system directly and thus they not have corresponding icons for their start by the user. Just simply replace existing commercials or add new ones in folder for commercials F:\Ad\Movie.

Please keep in mind commercials must have format in accordance with specification for MOD movies (see chapter 10.1).

MOD system may support (based on specific installation and set-up) also text messages / flash news. If necessary simply replace existing text messages / flash news or just add new ones in folder for text messages F:\Ad\Text.

15. Troubleshooting

In the case of problem with MOD system please check following to find possible reason of the problem. If still can not recover MOD system normal operation contact the nearest FUNTORO service centre to solve the problem. Your MOD system is covered by international warranty covering the territory of whole Europe.

No one monitor is working (no power)

- ⊗ check power supply (permanent power from vehicle battery)
- ⊗ check the main fuse of MOD system
- ⊗ check ACC signal voltage
- ⊗ check fuses of all Hubs
- ⊗ check GigaLEDs on the server - if not flashing MOD server must be replaced

Group of monitors is not working (no power)

- ⊗ check power supply on respective Hub (check / replace the fuse)
- ⊗ check GigaLEDs on respective Hub - if flashing then check MegaLEDs on connected ports. Monitors connected to one Hub are separated into 2 groups (1-3, 4-6). If not flashing some MegaLED then check all MegaLAN cables, if there is no short circuit on some of them. If there is defective cable please replace it by new one. If all MegaLAN cables are found OK then replace the Hub.

One monitor is not working (no power)

- ⊗ check MegaLED on respective port on the Hub - if not then replace the Hub
- ⊗ check correct connections of all connectors on MegaLAN cables from Hub to monitor



- ⊗ check correct connection of monitor cable into monitor
- ⊗ replace respective MegaLAN cable and if this is not a problem then replace monitor cable
- ⊗ if still not working then replace the monitor itself

No one monitor is booting the system (power is OK) - within 5 minutes from the start all monitors get dark and ON/OFF buttons are illuminated with red LED

- ⊗ check GigaLEDs on the server - if not flashing server must be replaced
- ⊗ when GigaLEDs on the server and Hubs are OK and MegaLEDs on all Hubs are OK and monitors are powered OK please check if:
 - ⊗ UI Generator session for SSD disc conversion finished OK
 - ⊗ correct version of the Profile was used during UI Generator session
 - ⊗ used version of the Profile is suitable for used monitors (supported resolution must be 800x480 for FMS5723 (7" monitor) resp. 1024x600 for FMS5722 (10" monitor))

Group of monitors is not booting (power is OK)

- ⊗ check respective Hub - check connection of GigaLAN cables. If GigaLAN cables connection is OK then replace the Hub

One monitor is not booting (power is OK)

- ⊗ check connection of all connectors on MegaLAN cables from hub to monitor
- ⊗ replace MegaLAN cable and if not help replace monitor cable
- ⊗ if problem still remains replace the monitor

System is extremely slow

Check connection of all GigaLAN cables in all Hubs - the correct direction of the Input & Output must be maintained on all Hubs.

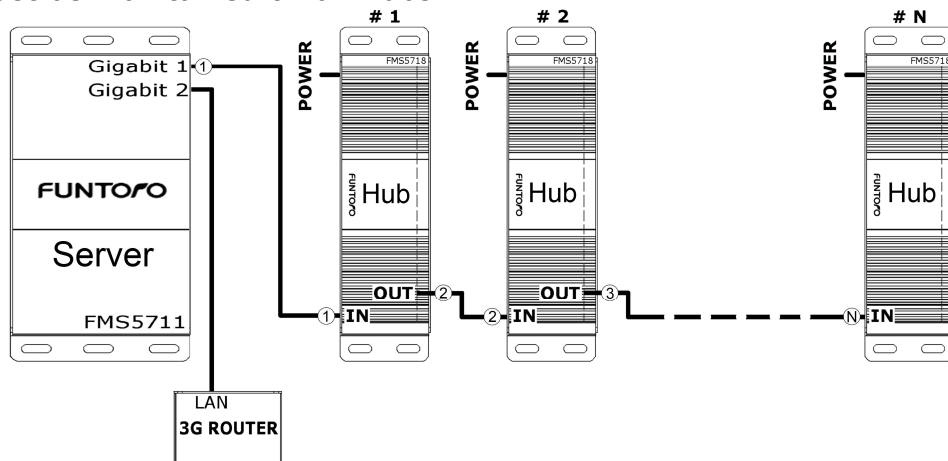


Diagram showing correct way of Hubs interconnections by GigaLAN cables



Please, do not try to modify system SW on the server or the Profile as their improper modification will cause system malfunction.



Do not insert USB key to USB port of the server, it is dedicated for system maintenance by service personal only and is not for media content use.



Please, do not make any HW configuration modification on the system as it can cause system malfunction.



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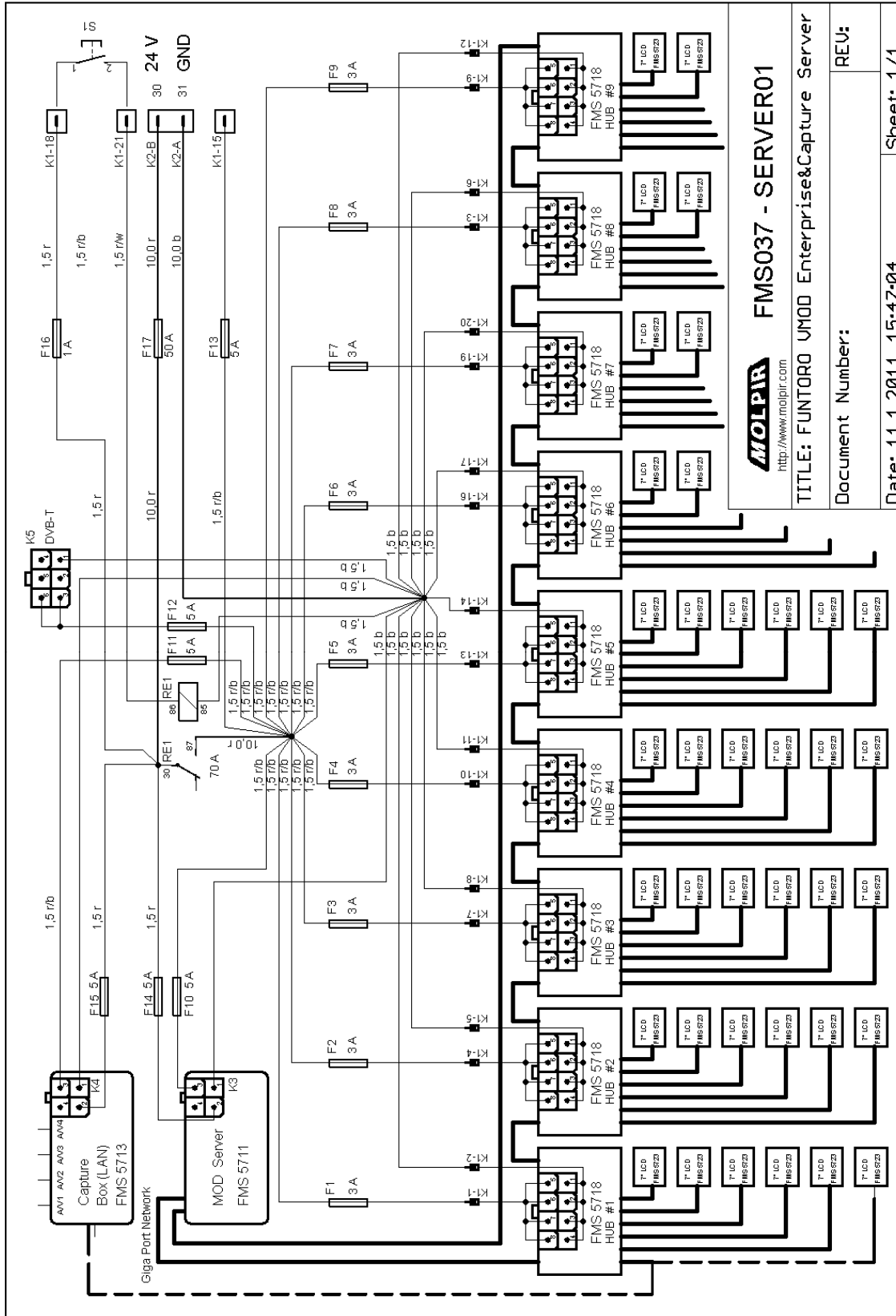
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15. Electric wiring diagram - fuses (Retrofit installations)



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