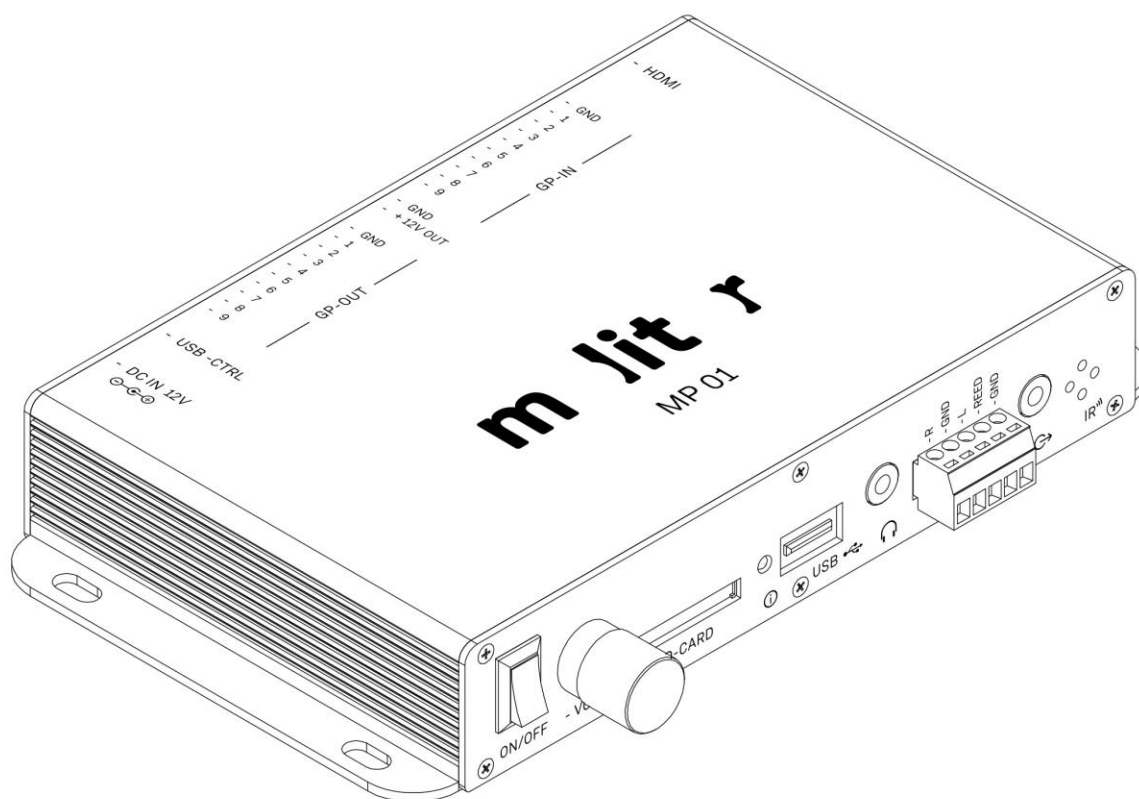


MP 01

Mediaplayer

Instruction Manual for the molitor MP 01 Mediaplayer



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1 INTRODUCTION

Congratulations on purchasing the molitor MP 01 Media Player. molitor GmbH not only produces the internationally renowned USO and VIA handsets, as well as the AP 01 Audio Player, but has also been planning and organising domestic and international exhibitions for many years. Our ever-growing experience has helped us to design both an audio player and media player that are easy to use and can be combined perfectly with our handsets.

Please read these instructions carefully before connecting the media player and using it. **The connection and start-up procedure should only be carried out by qualified personnel.**

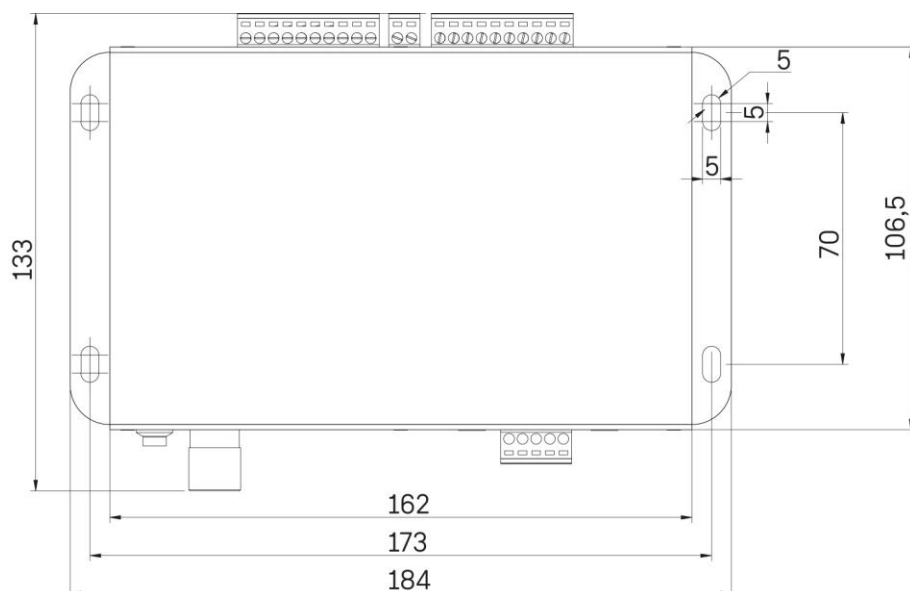
The molitor MP 01 Media Player plays back audio and video files in premium quality and boasts practical functionality. Audio and video files can be saved onto a commercial SDHC memory card or USB stick and then played back on the MP 01. Alongside classic stand-alone use in museums and exhibitions, the MP 01 is suitable for many other uses such as information offices, point-of-sale installations or for permanent background music.

2 FEATURES

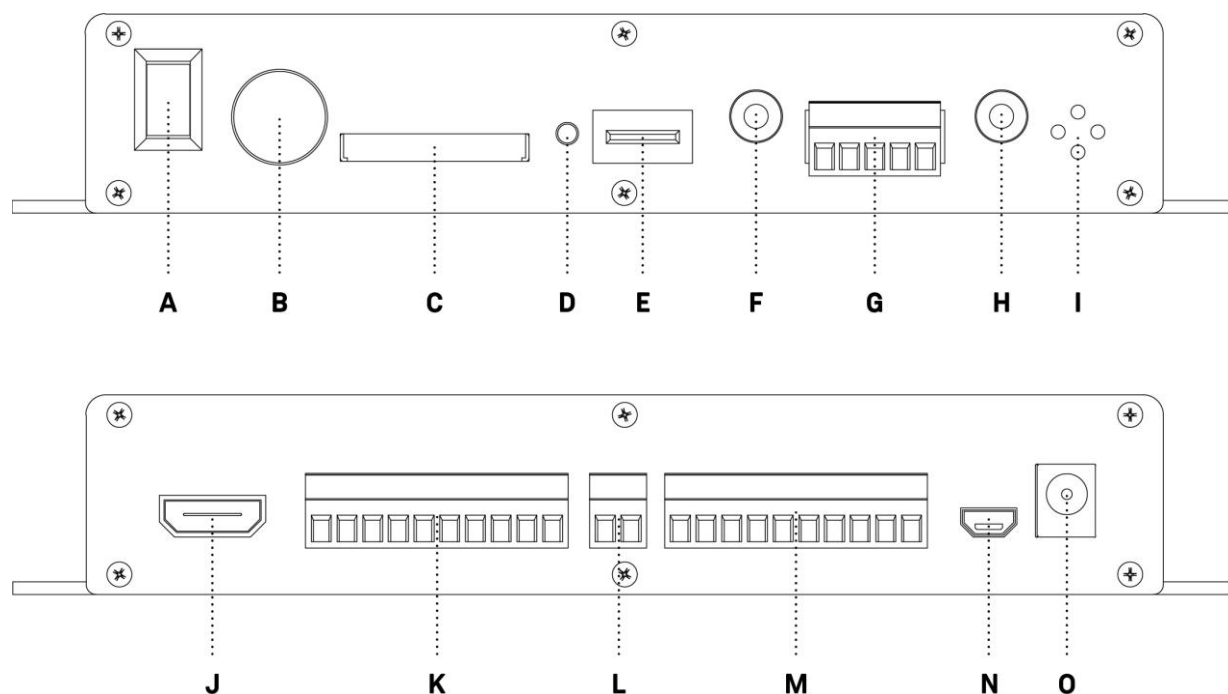
- Autostart – the MP 01 starts the audio and video files, as well as playlists automatically after connection to the power supply
- SDHC memory cards and USB sticks up to 64 GB are supported
- Starts / stops automatically when a handset with a reed contact is removed / replaced. The MP 01 is optimised for use with interactive handsets, such as the molitor USO or VIA
- Control via up to 9 external, isolated buttons / sensors
- Control of up to 9 external loads, such as LEDs, illuminated buttons or the optional relay switchboard using the programmable switching outputs
- Serial control via RS232 with Mini-USB interface
- Playlists and configurations can be individually created and customised
- Supported audio formats: MP3/ WAV
- Supported video formats: MP4, MOV and more
- Integrated amplifier for audio handsets and stereo headphones
- Line output for connection to amplifiers or active loudspeakers
- HDMI Output for Full HD displays and Projectors

3 TECHNICAL SPECIFICATIONS

Article Number	molitor MP 01
Power supply and Power consumption	12V DC ca. 3W/ 260mA, ca. 4W/ 330mA Ausgänge geschaltet
Supported media	SDHC (Secure Digital High Capacity) USB-Stick (USB Flash Drive) up to 64 GB
Formats	FAT, NTFS, FAT32
Outputs	<ul style="list-style-type: none"> • Headphone output (3.5 mm stereo jack), max. output power 80 mW • Headphone output (Phoenix plug- stereo), max. output power 80 mW • Audio LINE (3.5 mm stereo jack) • HDMI-Output • 10-Pin Output port (Phoenix plug) • 12V-Output
Inputs	<ul style="list-style-type: none"> • 10-Pin In-Port (Phoenix plug) • 2-pin switch contact for handsets (Phoenix plug) • Mini-USB Interface (serial control RS232)
Headphone Amplifier	Integrated headphone amplifier for up to two handsets or headphones. Max. output power 80 mW
Supported Video Formats	MP4, MOV and more, Resolutions up to 1080p@60Hz (upt to 30 mBit/s)
Supported Audio Formats	MP3 (up to 320 kBit/s), WAV (up to 3 mBit/s)
Weight	370 g
Dimensions L/D/H	18.5 × 16 × 3 cm incl. Regulator and plug
Accessories	12V-Power Supply, 100-240 VAC, 2-Pin, 5-Pin and 10-Pin terminal strips
Operating temperature and Humidity	0-40 °C 80 % non-condensing



4 OVERVIEW



- A ON / OFF Switch
- B Volume Control
- C SDHC – Memory card slot
- D LED (red = power on / blinking red = initialising / green = system ready)
- E USB-Interface, Type A
- F Headphone output (3.5 mm stereo jack), adjustable volume
- G 5-Pin port for headphones or up to 2 handsets and switch contacts (Phoenix-plug: R, GND, L, REED, GND), adjustable volume
- H Line-Output (3.5 mm stereo jack), line-level
- I Infrared receiver

- J HDMI-Output
- K 10-Pin Input Port for buttons / sensors (Phoenix-plug: 1× GND, 9× IN)
- L 2-Pin 12V output for additional loads, LEDs or external Switchboard, max. 1A (Phoenix plug)
- M 10-Pin output port for switching external loads, max. 20mA per output (Phoenix plug: 1× GND, 9× OUT)
- N Mini-USB interface (serial control via RS232)
- O 12V DC-Input

5 START-UP PROCEDURE

Default application of the MP 01

1. The MP 01 is delivered with a standard setup on the supplied SDHC card. It contains several sample video clips that can be selected via the switching inputs.
2. If desired, a video display or similar can be connected with an HDMI cable via the HDMI socket.
3. Connect the 12V DC power supply and turn on the player. The system LED will light red during the boot up phase and will change to green after a short time. The player is now ready for operation.
4. If you would like to control the player using buttons or sensors, they can be connected as shown in section 6, 'Pin assignment 10-pin input port'.

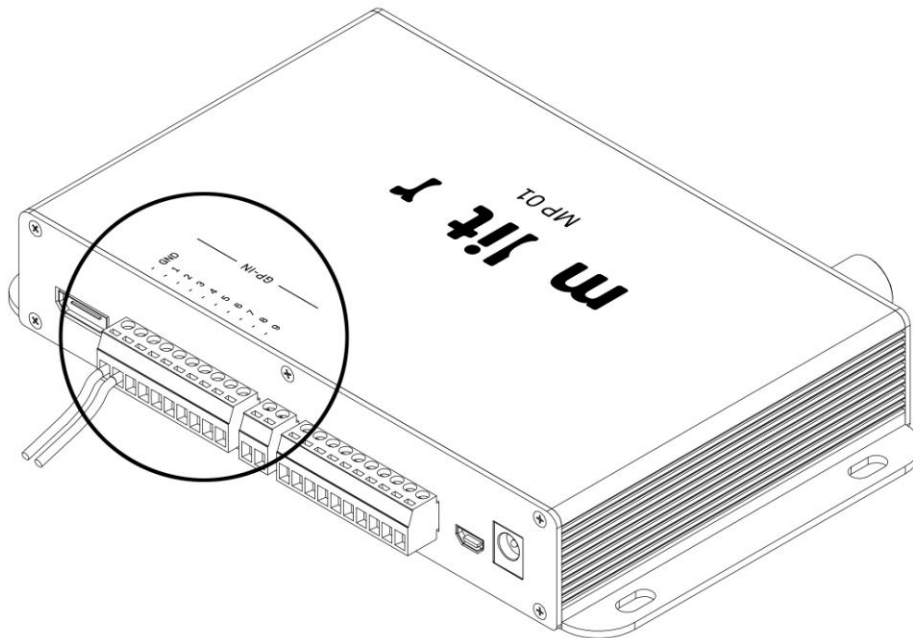
Alternative Application

If available, connect an audio handset with a reed contact to the MP 01. This can be done as shown in section 8, 'Pin assignment – Headphone Output'. Up to two audio handsets can be connected to the 5-Pin phoenix socket.

Important Notes

1. **Do not remove the SD-Card from the player while it is running. This could cause data to be lost or damaged. Before removing the SD-Card or USB flash drive from the unit, turn the unit off or unplug it from the power supply.**
2. Only *one* storage medium can be used at a time - SDHC memory card *or* USB stick.
3. If you wish to simply play one or more files in a loop, place the media files on the SD card or USB stick and delete the playlist file (if necessary, save this file beforehand on another storage device for future use). The player will now playback all of the media files in alphanumeric order before starting from the beginning again.
4. Keep in mind the maximum data rates for audio and video files (see "Technical Specifications" on page 4).
5. When using mono audio handsets, we recommend that you use mono audio files. For stereo headphones or handsets with a language toggle switch, stereo audio files should be used.

6 PIN ASSIGNMENT 10-PIN IN-PORT



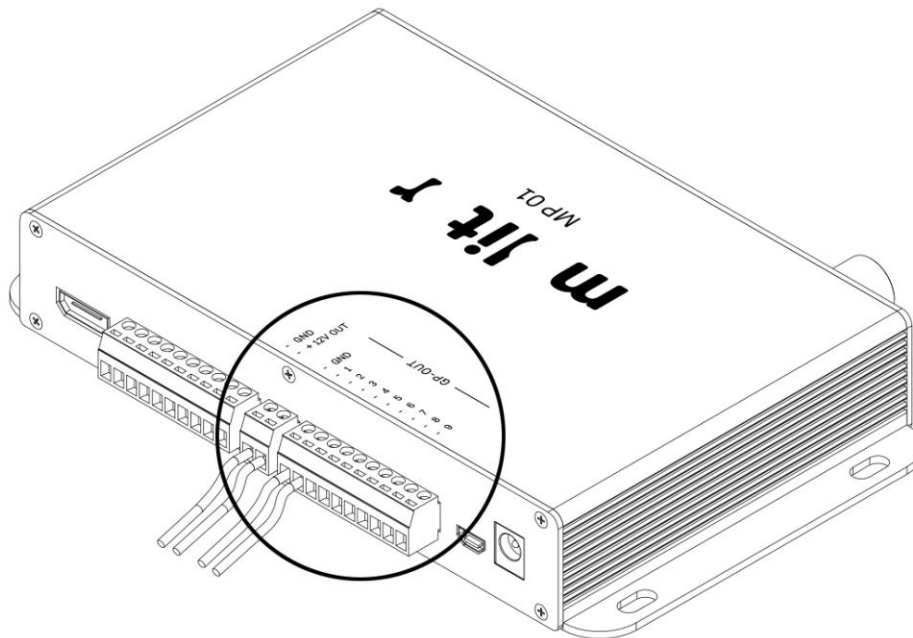
Overview of the GP-IN Connection

Pin 0	=	Ground (GND)
Pin 1	=	Switch contact 1
Pin 2	=	Switch contact 2
Pin 3	=	Switch contact 3
Pin 4	=	Switch contact 4
Pin 5	=	Switch contact 5
Pin 6	=	Switch contact 6
Pin 7	=	Switch contact 7
Pin 8	=	Switch contact 8
Pin 9	=	Switch contact 9

Here you can connect potential-free buttons, which can then be assigned function in the playlist. It is recommended to loop the ground (GND) from one button to the next if you wish to connect several buttons.

Detailed information on the port configuration of special applications can be found at <https://support.molitor-berlin.de>

7 PIN ASSIGNMENT 10-PIN OUT-PORT AND 12V OUTPUT



Overview of 12V Output and GP-Out Connections

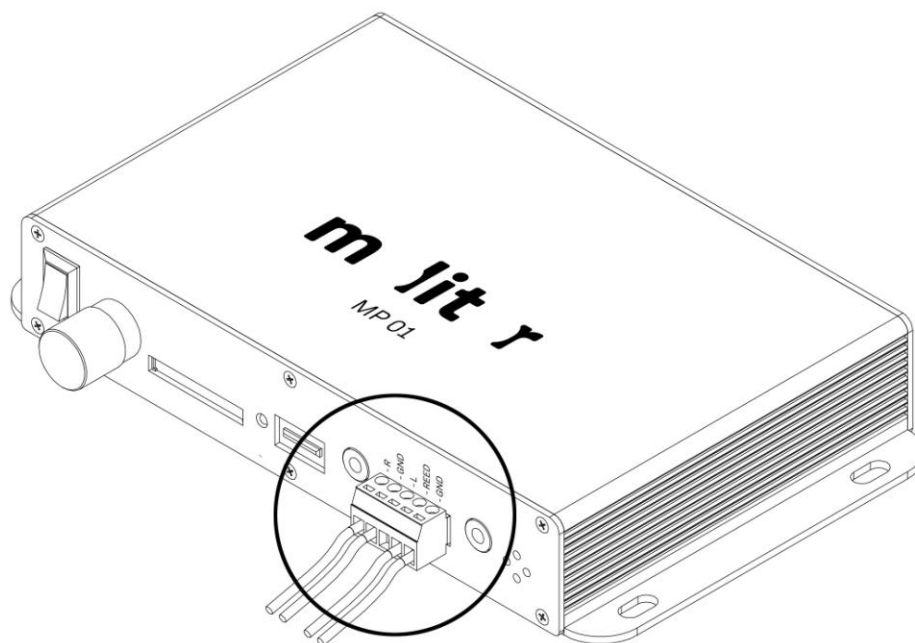
Pin 0	=	Ground (GND)
Pin 1	=	12V Output (Unswitchable), max. 1A
Pin 0	=	Ground (GND)
Pin 1	=	Switch contact 1
Pin 2	=	Switch contact 2
Pin 3	=	Switch contact 3
Pin 4	=	Switch contact 4
Pin 5	=	Switch contact 5
Pin 6	=	Switch contact 6
Pin 7	=	Switch contact 7
Pin 8	=	Switch contact 8
Pin 9	=	Switch contact 9

The 12V outputs can be used to power small external loads such as LEDs, illuminated buttons or the optional switchboard. These can be controlled by programming the switching outputs in the playlist file. The switching outputs switch against the device ground (GND), and the current is internally limited to 20mA per output.

Detailed information on the port configuration of special applications as well as the optional Switchboard can be found at

<https://support.molitor-berlin.de>

8 PIN ASSIGNMENT - HEADPHONE OUTPUT



Übersicht Anschluss Headphone

- Pin 1 = Audio-Output right
- Pin 2 = Ground (GND)
- Pin 3 = Audio-Output left
- Pin 4 = Switch contact (eg. reed-contact of an audio handset)
- Pin 5 = Ground (GND) (eg. reed-contact of an audio handset)

The audio and reed contact circuits of up to two audio handsets can be connected here. **The audio connection to a handset always requires a connection to Ground (GND)** and for mono-handsets, to an audio output (either left or right).

If two handsets are used, please ensure that the reed contacts are connected in parallel in order to ensure that the circuit works correctly. As long as one of the handsets is lifted, the player will start. If both handsets are placed back, the playback will stop.

Detailed information on the connection of audio handsets with a language selector switch or pushbutton can be found at

<https://support.molitor-berlin.de>

9 HDMI-OUTPUT

The HDMI output provides a digital video signal including audio with a resolution of up to 1920x1080p @ 60Hz.

The volume of the audio signal is also adjusted by the volume control knob.

10 REMOTE CONTROL

The included remote control can be used if necessary, to adjust the player settings. In addition, it can also be used to manually control content if desired.

In the *setup* menu you have access to the basic settings of the player.

Detailed information on possible settings in the player menus can be found at

<https://support.molitor-berlin.de>

11 OPTIONAL SWITCHBOARD

The optional switchboard enables you to switch larger currents individually, and potential-free, from the switching outputs. When connected to the MP 01, the board has power supplied by the 12V output and provides 9 independent 2-pole switches, which are switched reliably by wear-free solid-state components.

Detailed information on applications for the switchboard can be found at

<https://support.molitor-berlin.de>

12 CREATE PLAYLISTS YOURSELF

The playlists can be programmed easily, even for complex requirements. The video, audio and image files can be played in a particular order or triggered by means of an external control (e.g. buttons / sensors). In addition, the switching outputs can be activated selectively or in groups during certain events (the playback of audio or video files).

If there is no playlist on the memory card, the device will play the files in a continuous loop in alphanumeric order.

The playlist is a text file, entitled **playlist.txt** and can be created using any common text editor program. Save the playlist with the name **playlist.txt**, together with your selected video, audio or image files on upper level of your SDHC memory card or USB stick. **Important:** The data storage cannot be edited on Mac OS, i.e. on an Apple computer, because folders and hidden files are created which interfere with the player's ability to read the content.

The SDHC card supplied with the player contains sample video clips as well as a playlist that allows selective launching of individual clips via the GP inputs, as well as triggering the switching of the GP outputs.

Playlists for some example applications, as well as command lists and detailed instructions can be found at

<https://support.molitor-berlin.de>

13 SERIAL CONTROL VIA RS-232

The Mini-USB interface on the back of the player can be used to control the player or to query its status via RS232.

Detailed information on control via RS-232 as well as command lists can be found at

<https://support.molitor-berlin.de>