



NP10 QUICK GUIDE V. 2.0

Warranty

NP10 has a 24 month warranty on the electronic parts, running from the date of purchase. The warranty will not be valid in case of tampering with the device or in case personnel not authorised by the manufacturer or by the authorised dealer should carry out work on it.

N.B. responsibility of the purchaser: in case of operation under warranty, the device must be packaged so as to prevent damage during transport and shipped to the manufacturer together with all the accessories.

Warranty rules

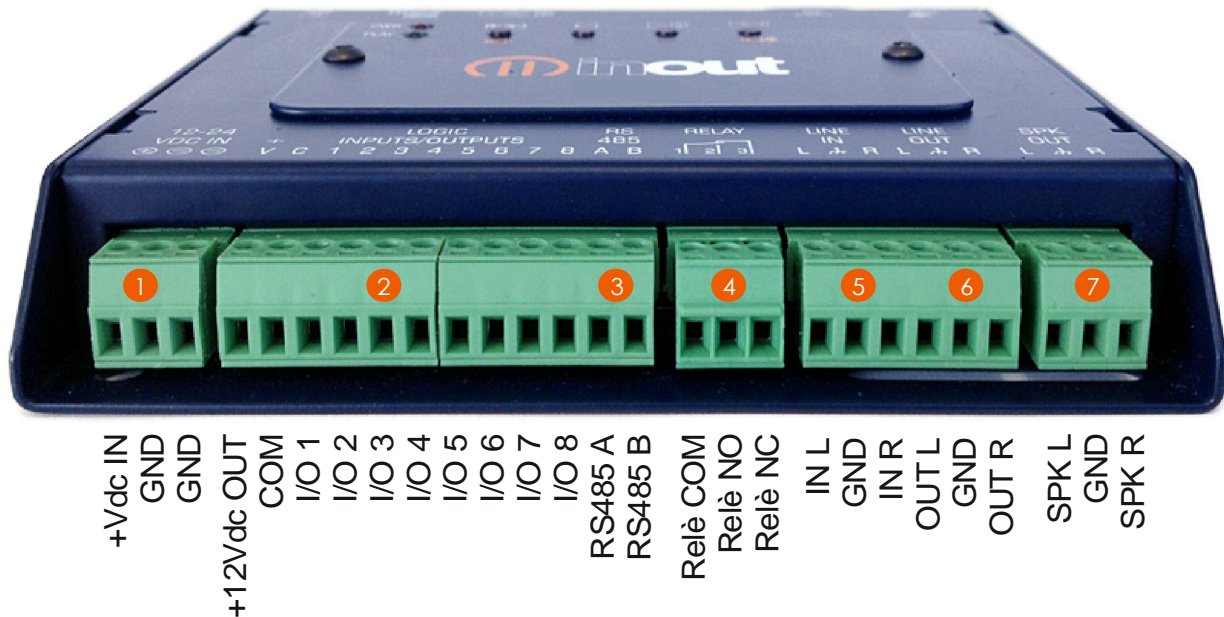
1. In order to exercise his warranty rights, the purchaser must enclose with the device a copy of evidence of purchase duly stamped by the dealer (bill/invoice).
2. The warranty lasts for 24 months for the electronic parts. The warranty is granted at the point of sale or else directly requested from the manufacturer.
3. The warranty only covers damage to the product which makes it work badly.
4. Work under warranty will only mean repairing or replacing, free of charge, any parts acknowledged to be defective during manufacture or in their material, including labour costs.
5. The warranty does not apply to damage caused by negligence or failure to comply with the instructions, or damage caused by unauthorised people, with a special reference to the outside parts.
6. Also, the warranty does not apply to damage caused to the device by connection to unsuitable power sources.
7. The warranty does not cover parts subject to wear after use, or the container if the material is not defective.
8. The warranty does not include transport costs, which will be paid for by the purchaser in relation to the manner and time of transport.
9. The warranty will run out after 24 months have elapsed. In this case, service will be provided charging for the parts replaced, labour costs and transport according to the current rates.
10. Any dispute will be settled exclusively before the Court of Law of Venice.

Obsolete devices disposal :



- When you find this picture on a device, it means that the device is compliant with European Directive 2012/19/EU.
- All electronic and electric devices should be disposed separately from normal garbage.
 - The proper disposal of old devices, accessories, and of the batteries in particular, it contributes to prevent possible negative consequences for human health and for the environment.
 - For more detailed information on the disposal of obsolete devices, contact the municipality, the garbage disposal service or the shop in which the product has been acquired.

Installation and connection description



- ① **VDC IN** Input feed 12÷24VDC.
GND Ground voltage / auxiliary ground voltage for input activation using outside contacts
- ② **VE** Aux +12V / 200mA max., available for output activation or outside feed sensors.
C COM INPUT
I/O1↔8 8 logic on/off ports individually configurable as input or output

 **See application example for connection**

- ③ **RS485** RS485 serial communication port
- ④ **RELAY** Relay contact output COM/NO/NC with configurable status (schedule, play, etc.)
- ⑤ **IN L/R** Pre-amplified audio input L/R channels for outside music sources with Mixer function.
GND Ground signal of pre-amplified audio input.
- ⑥ **OUT L/R** Pre-amplified audio output L/R channels.
GND Ground signal of pre-amplified audio output
- ⑦ **SPK L/R** Amplified 20+20W audio output for speaker, L/R channel.
GND Ground signal of amplified audio output.



- Ⓐ Input motion sensor connector
- Ⓑ LAN 10/100 Ethernet port
- Ⓒ USB port for pen drive.
- Ⓓ microSD Card slot connector
- Ⓔ Service microUSB connector (Reserved)
- Ⓕ Command keys:
 - ⏮ = (brief pressure) previous file / 🔊 (prolonged pressure) reduce output volume
 - ⏹ = Stop file reproduction.
 - ⏮⏭ = Play/Pause file
 - ⏭⏮ = (brief pressure) next file / 🔊 (prolonged pressure) increase output volume
- Ⓖ Power Led: lit = device is live.
- Play Led: lit = audio file playing;
blinking = pause / system check / error



IMPORTANT NOTICES.








1. NP10 has been designed and made to work only with the following mains power supply: 12÷24VDC.
2. The device must be serviced only by qualified staff.
3. Do not put objects inside the device through the openings, in order to prevent the risk of fire or shock.
4. Disconnect the device from the power socket before cleaning. Clean the device using a soft, dry cloth. Do not use liquids or spray which can contain flammable substances.

Content of the kit NP10

- n. 1 NP10 device;
- n. 1 quick guide;
- n. 1 wall mount AC/DC adapter 40W/12Vdc
- n. 1 interchangeable AC plug Euro type
- n. 1 interchangeable AC plug U.K. type
- n. 1 uSD flash memory
- n. 1 uSD adapter
- n. 1 Ethernet cable
-

How to start?

- Try out demo examples contained in the supplied microSD.
- At power-up, NP10 performs a system check signaling by flashing the green led, wait for the LED to turn off.
- To create folders into microSD, insert blank flash card into the player and power up NP10.

Folders	What they need
 config	Folder for memory configurations
 music	Folder for music files
 playlist	Folder for playlists files
 scheduler	Folder to save time schedules
 sensor	Folder for files that work with motion sensor
 spot	Folder for spot files
 system	System Folder and Help Messages



IMPORTANT:

If the microSD is not inserted, NP10 does not work and the green LED remains blinking





IMPORTANT:

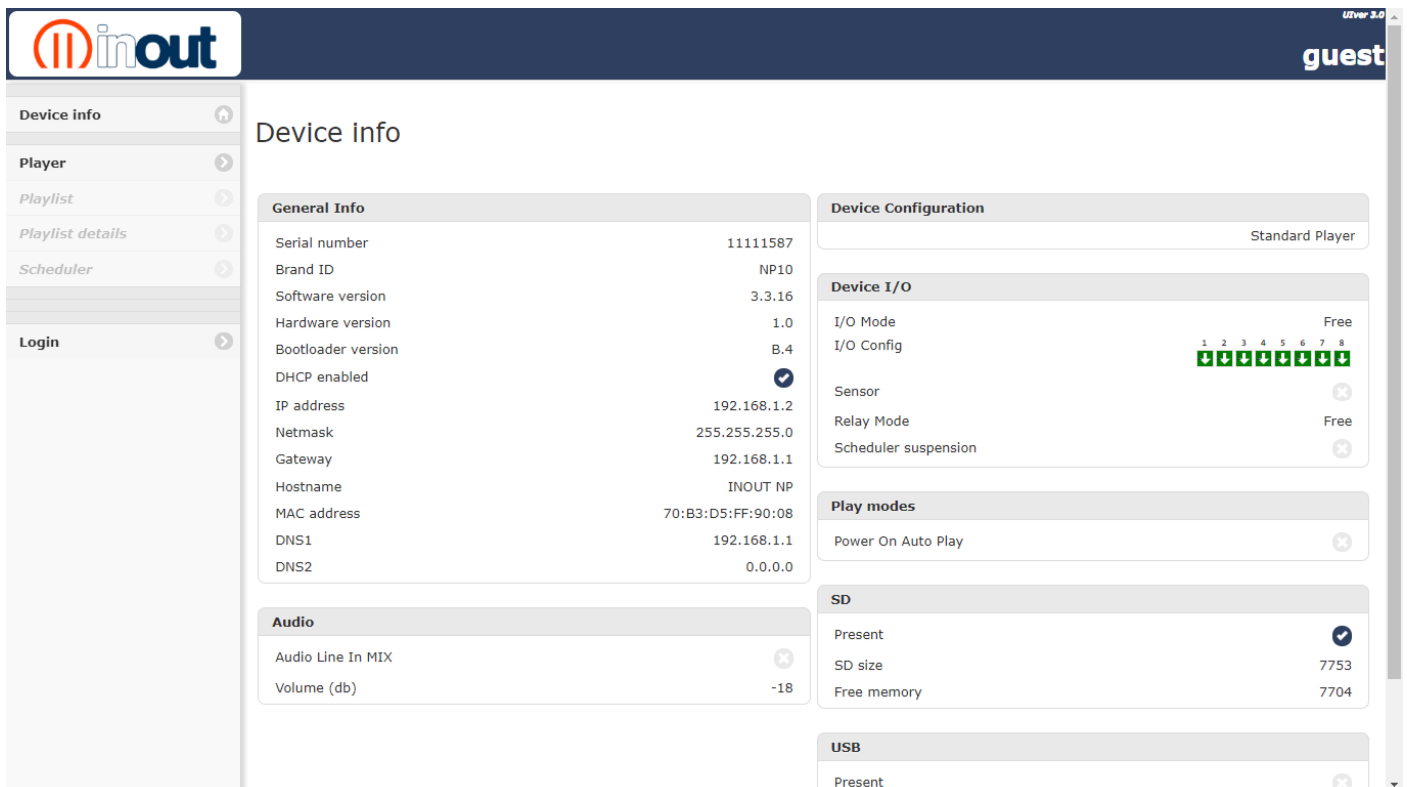
NP10 is compatible with the following browsers.

- Chrome 7+
- MozillaFirefox 4+
- Internet Explorer 10+ / Windows 10 Edge
- Safari 6+ for MAC

Please connect the NP10 to your router before executing the following steps.

- open your Web browser on your PC (such as CHROME)
- on the Address field, type the following address `http://192.168.1.1` or IP address of the router.
- you will get a window asking for the username and password of the router.
- enter the username and the password to log on to the router administrative page.
- Check the router's DHCP clients table by checking the attached device list.

Utility: after power up, wait for the green led to turn off, press both  &  buttons for 2 sec, NP10 play IP address assigned and firmware version.

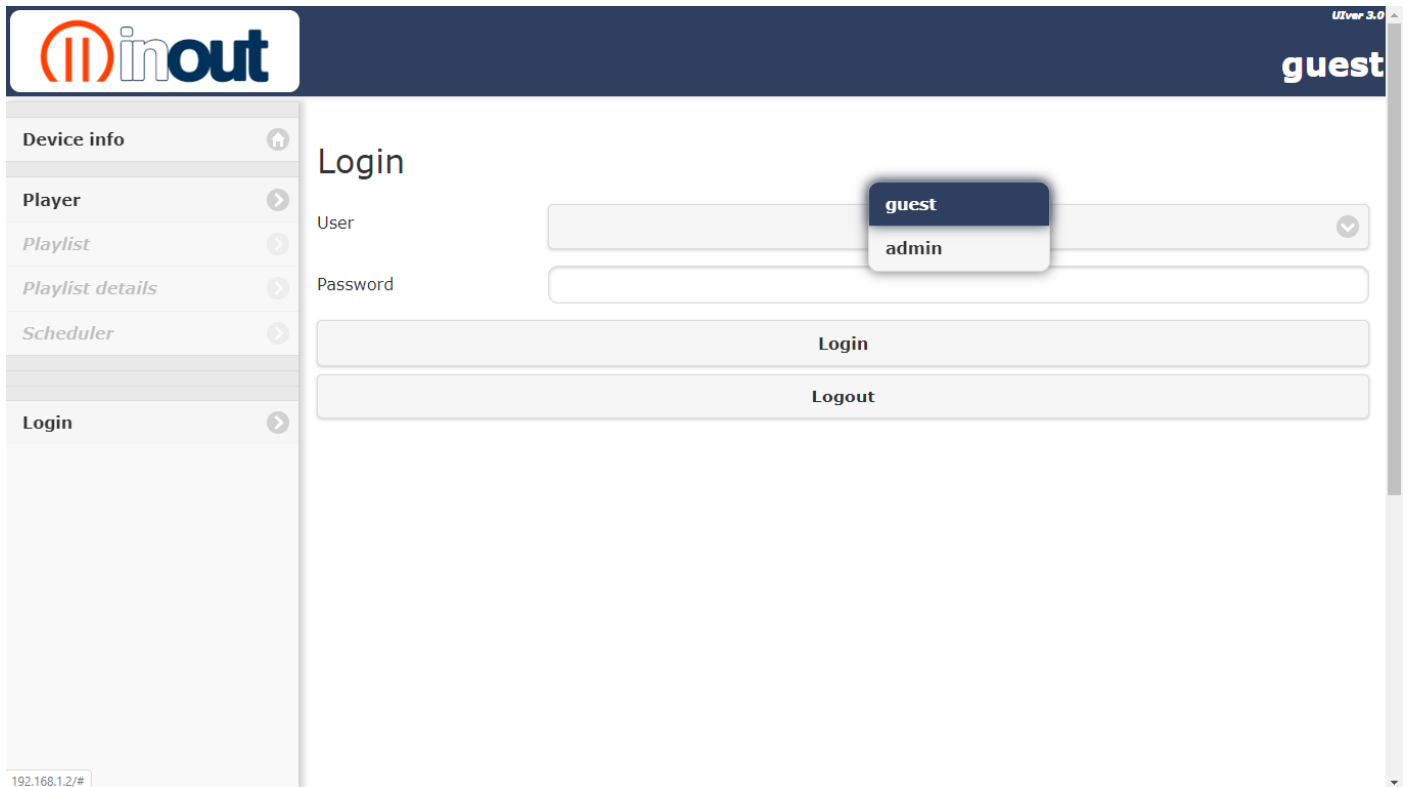


Press Login menù, select User Admin.

Default value:	User	Password
Guest	guest	guest
Administrator	admin	admin

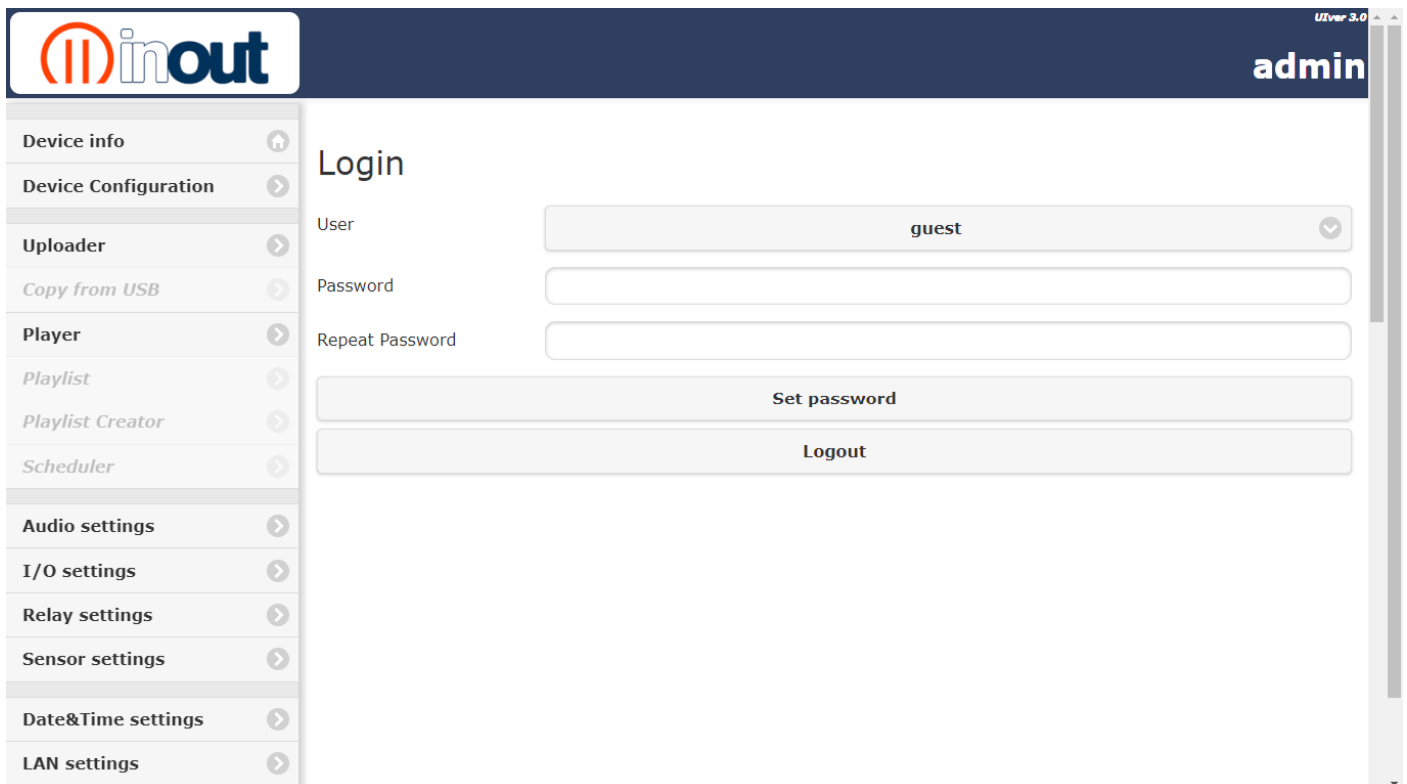


IMPORTANT: timeout login 10min.



The screenshot shows the 'inout' web interface. The top header has the 'inout' logo on the left and 'guest' on the right, with 'UI ver 3.0' in the top right corner. A left sidebar contains a menu with items: 'Device info', 'Player', 'Playlist', 'Playlist details', 'Scheduler', and 'Login' (which is highlighted). The main content area is titled 'Login'. It features a 'User' dropdown menu with 'guest' selected and 'admin' as an option. Below this is a 'Password' input field. At the bottom of the main area are two buttons: 'Login' and 'Logout'. A small status bar at the bottom left of the sidebar shows '192.168.1.2/#'.

If you change login, insert password and confirm with Set password button.



The screenshot shows the 'inout' web interface with the user role changed to 'admin'. The top header now displays 'admin' on the right. The left sidebar menu is expanded to include additional settings: 'Device info', 'Device Configuration', 'Uploader', 'Copy from USB', 'Player', 'Playlist', 'Playlist Creator', 'Scheduler', 'Audio settings', 'I/O settings', 'Relay settings', 'Sensor settings', 'Date&Time settings', and 'LAN settings'. The 'Login' page in the main area now includes a 'Repeat Password' field in addition to the 'User' dropdown (showing 'guest') and 'Password' field. The buttons at the bottom are 'Set password' and 'Logout'.

Device Info

Web page displaying all the parameters set in the NP10 device.

To change settings, select the menu on the left side of the web page

Device info

General Info

Serial number	11111587
Brand ID	NP10
Software version	3.3.16
Hardware version	1.0
Bootloader version	B.4
DHCP enabled	<input checked="" type="checkbox"/>
IP address	192.168.1.2
Netmask	255.255.255.0
Gateway	192.168.1.1
Hostname	INOUT NP
MAC address	70:B3:D5:FF:90:08
DNS1	192.168.1.1
DNS2	0.0.0.0

Device Configuration

Standard Player

Device I/O

I/O Mode	Free
I/O Config	1 2 3 4 5 6 7 8 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
Sensor	<input type="checkbox"/>
Relay Mode	Free
Scheduler suspension	<input type="checkbox"/>

Play modes

Power On Auto Play ☐

SD

Present	<input checked="" type="checkbox"/>
SD size	7753
Free memory	7704

USB

Present	<input type="checkbox"/>
---------	--------------------------



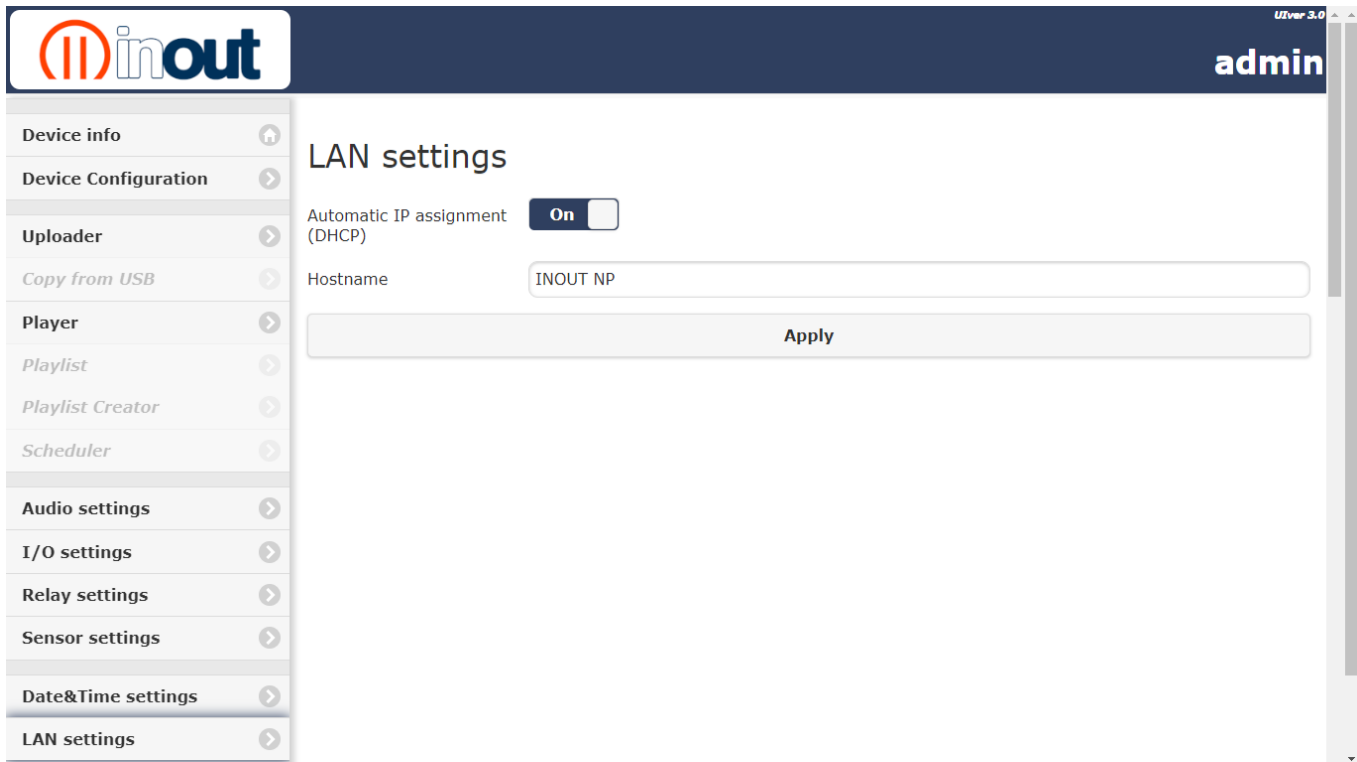
IMPORTANT:

always save the settings with the save/apply button

LAN settings

DHCP Automatic IP assignment

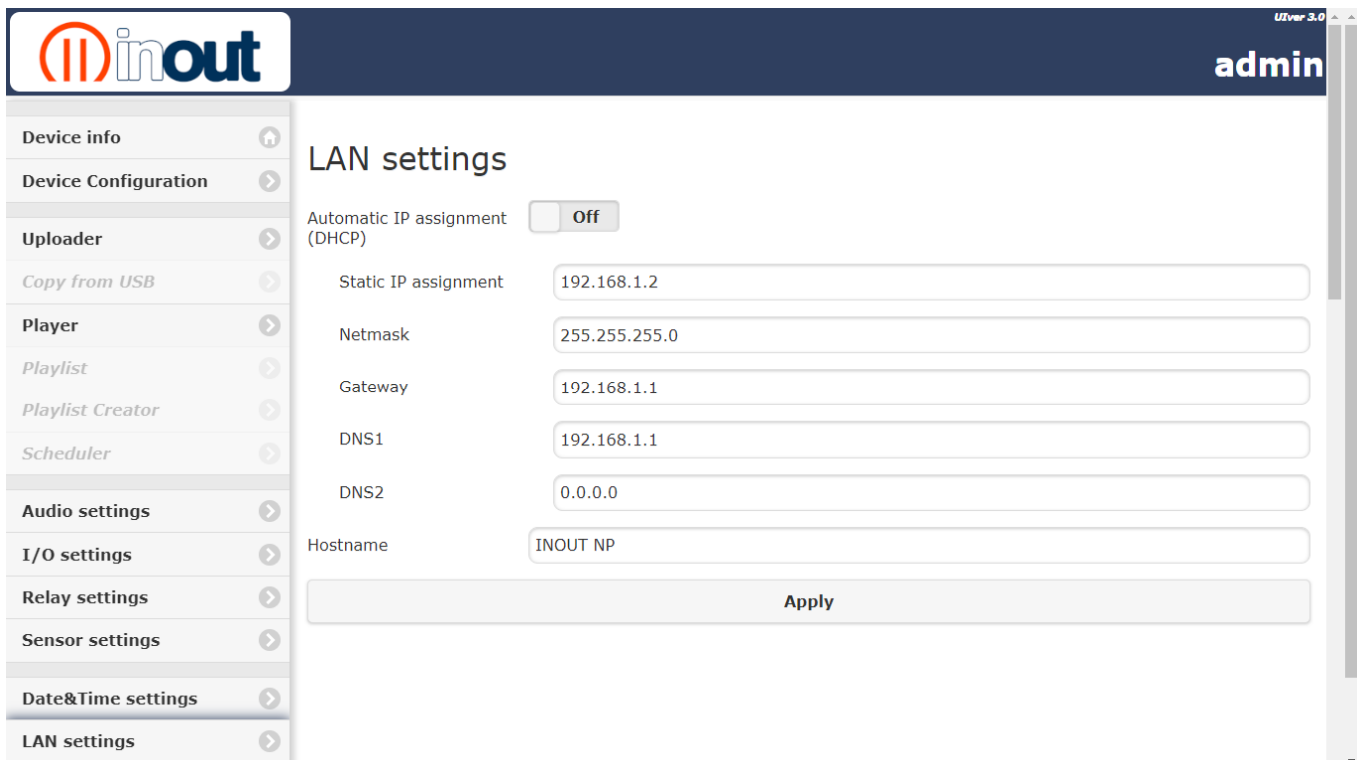
Set DHCP ON, enter your prefer Hostname and save with Apply.



The screenshot shows the INOUT web interface. The top header has the INOUT logo on the left and 'admin' on the right. A left sidebar contains a menu with items: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings (highlighted). The main content area is titled 'LAN settings'. It features a toggle for 'Automatic IP assignment (DHCP)' set to 'On'. Below this is a text input field for 'Hostname' containing 'INOUT NP'. At the bottom of the form is an 'Apply' button.

Static IP assignment

Set DHCP OFF, enter the IP address, Subnet Mask, Default Gateway and DNS server. Enter your prefer Hostname and save with Apply.



The screenshot shows the INOUT web interface with the same sidebar as the previous image. The main content area is titled 'LAN settings'. The 'Automatic IP assignment (DHCP)' toggle is now set to 'Off'. Below this, there are five text input fields: 'Static IP assignment' (192.168.1.2), 'Netmask' (255.255.255.0), 'Gateway' (192.168.1.1), 'DNS1' (192.168.1.1), and 'DNS2' (0.0.0.0). Below these is a 'Hostname' field containing 'INOUT NP'. At the bottom is an 'Apply' button.

Audio settings

The screenshot shows the 'Audio settings' page in the NP10 web interface. The settings are organized into several sections:

- Volume OUT (dB):** A slider set to -18.
- Fade In (msec):** A slider set to 581.
- Fade Out (msec):** A slider set to 441.
- Cross Fade In (msec):** A slider set to 661.
- Cross Fade Out (msec):** A slider set to 821.
- Amp. Mute:** A dropdown menu set to 'Auto'.
- Audio Line In MIX:** A toggle switch set to 'Off'.
- Line IN Level (dB):** A slider set to -16.
- Line IN Level MIX (dB):** A slider set to -22.
- L/R Line In Mode:** A dropdown menu set to 'LineIN Stereo (L/R)'.
- Line Out Mode:** A dropdown menu set to 'Stereo'.
- Out Mode:** A dropdown menu set to 'Normal'.
- Bass Level (dB):** A slider set to 5.
- Bass Freq (Hz):** A slider set to 100.
- Treble Level (dB):** A slider set to 3.
- Treble Freq (Hz):** A slider set to 8000.

Volume out: level preamplified and amplified audio output

Fade In: setting the initial fading time of playing the audio file

Fade Out: setting the finally fading time of playing the audio file

Cross Fade In: setting the fading time of the Line In before playing the audio file.

Cross Fade Out: setting the fading time of the Line In after playing audio file

Amp. Mute:

- Auto: power amplifier is active only during the audio files playing. When NP10 is in STOP mode the power amplifier is in Standby.
- Disable: power Amplifier always active, also when NP10 is in STOP mode.

Audio line in mix: switch on/off audio Line In

Line In Level: setting level Line In when player in stand by

Line In Level Mix: setting level Line In of the background during the playing of the audio file.

L/R Line In Mode: setting Line In mode Stereo / Mono / Left / Right

Line Out Mode: setting Line Out mode Stereo / Mono

Bass Level: setting Low tone level control

Bass Freq: setting Lower limit frequency

Treble Level: setting High tone level control

Treble Freq: setting High limit frequency

I/O settings

Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
IO1	OFF	ON				IN
IO2	OFF	OFF		OFF	Free	OUT
IO3	OFF	OFF	6000	ON	Play	OUT
IO4	OFF	OFF		OFF	Play+Sensor	OUT
IO5	OFF	OFF			Play + Blink in Pause	OUT
IO6	OFF	OFF			Blink in Play	OUT
IO7	OFF	OFF			Blink in Stop	OUT
IO8	OFF	OFF			Pulse NoActiveInputs	OUT

Reload

Save

I/O Config: Setting logic port input or output

Out Mode: Output logic port setting:

Free: remote enabled output with serial or TCP / IP command

Play: active output only during playback (no from sensor)

Play+Blink in pause: output active during playback and blink when paused

Blink in Play: output in blink during playback

Blink in Stop: output in blink when stopped

Pulse No Active Inputs: It allows the continuous reproduction of tracks with the play contact. When you disable the play contact, an output pulse commands the stop.

NB. Only for Standard Player and Playlist Sequence Configuration.

Pulse Mode: Setting the output logic port in pulse mode, set the pulse duration time in tenths of a second.

IMPORTANT: at the end of the track/file the output is deactivated

Inversion: Setting the mode of input/output active high or active low.

OFF: active-low input mode; the functioning of the input is connected to the ground/GND of the device.

ON : active-high input mode; the functioning of the input is applied with a positive voltage between 5 and 12Vdc.

Value: Test function Output logic port

IMPORTANT: save the settings with the button apply/save

Relay settings

The screenshot displays the 'Relay settings' page in the Minout web interface. The sidebar on the left lists various configuration categories, with 'Relay settings' currently selected. The main panel features a 'Relay Test' toggle switch set to 'Off'. Below this, there are two dropdown menus: 'Relay Mode' and 'Logics'. The 'Relay Mode' dropdown is open, showing three options: 'Free', 'Play Status', and 'Play Status + Sensor'. A 'Reload' button is positioned at the bottom of the settings area. The top of the interface includes the 'minout' logo and the user 'admin'.

Relay Test: Only for Test function relay on/off.

Relay Mode:

- Free to remote control or scheduler function
- Play status, the relay is activated when the device is playing
- Play status + Sensor, the relay is activated when the device is playing or sensor is activated

Logics: setting normal or inverted

Sensor settings motion sensor management

Sensor enable: Switch On/Off motion sensor

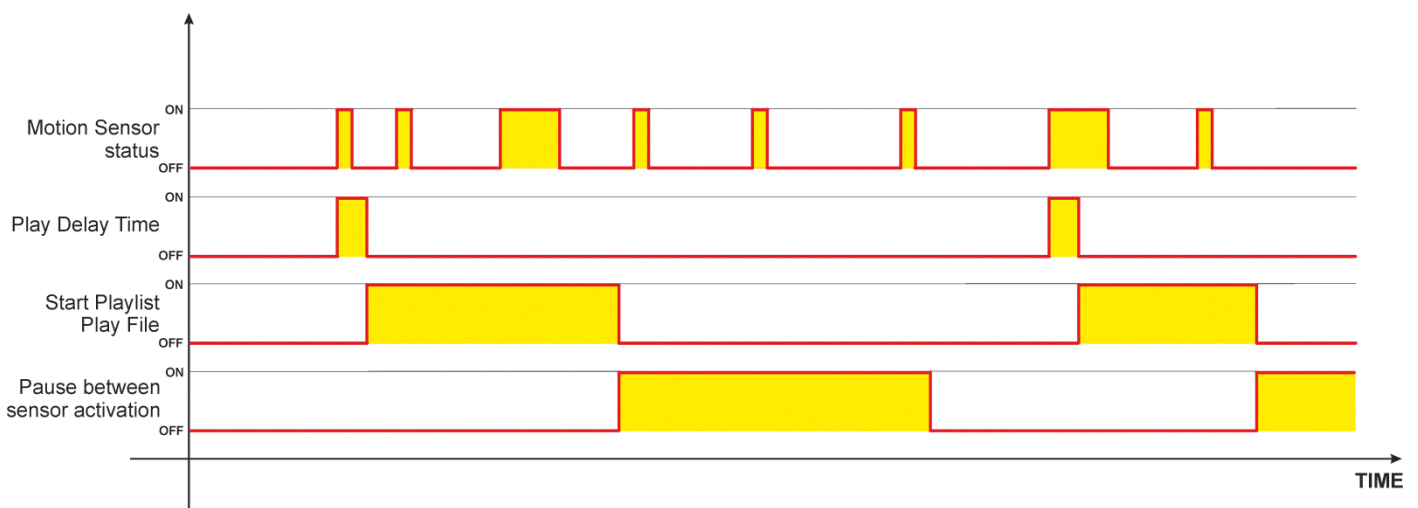
Pause Time: Setting Pause time between two activations of the IR sensor

Auto Play Time: Setting Auto Play Time for playing of a message when the IR sensor is not activated.

Play Delay time: Setting delay time of the play audio file from the activation of the IR sensor

Power On Stability Time: setting time when NP10 power on, during this stage the output status is undefined and detection is therefore not guaranteed.

Bind a Playlist: select playlist when sensor activated



Timed playlist check sensor activation

Stops the player if the sensor is no longer activated

Check sensor activation ☒ On

Without any activation, the player stops after (sec)

Reload

When the sensor is first detected, playback of the playlist starts from the first track after the delay time set every time the sensor is detected, it resumes the timing with the set time Stop Time.

Once the Stop Time timing is over, the player controls the stop to the playlist.

At the end of each detect sensor the set Stop Time timing begins, at each subsequent sensor detection.

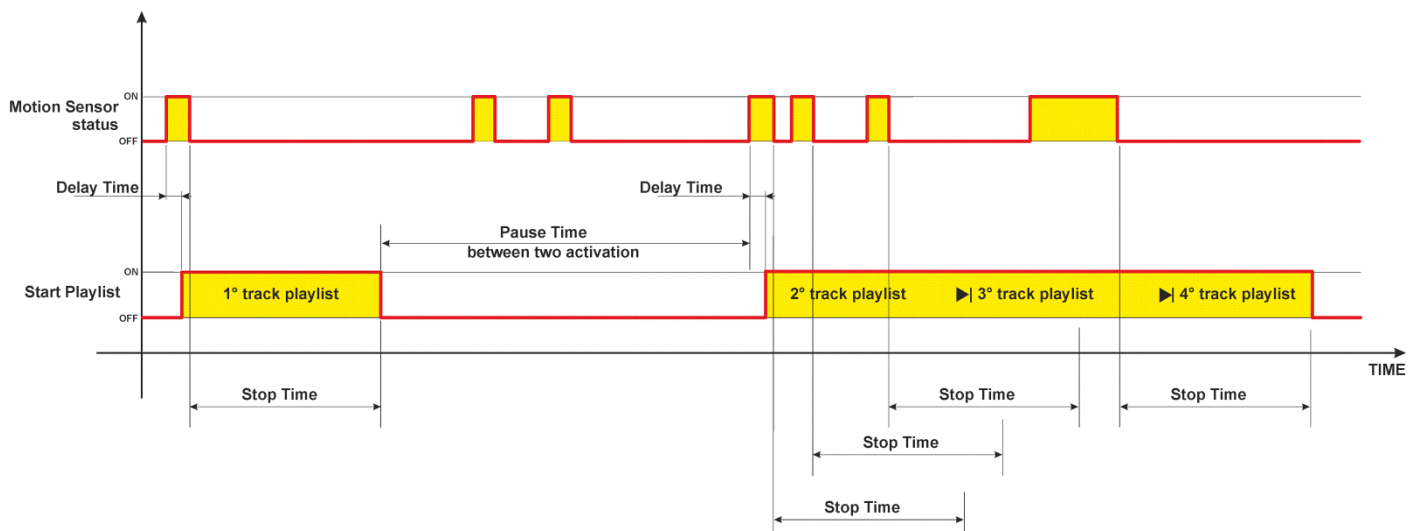
From this moment starts the masking / pauses of the sensor between 2 activations.

When the Pause Time between ends, the new detect starts playing from the next song to the one interrupted before the playlist.

If sensor detection continues, the playlist continues to play the tracks one after the other without pausing between them.

Check Sensor activation: Switch On/Off timed playlist

Stop playlist after: Setting time stop playlist without any activation.



Date&Time settings

Select date and time and press “Change Date and Time with above values” button.

Option set: Fast setting “ Sync clock using your PC date and time” button.

The screenshot shows the Minout web interface. On the left is a sidebar menu with options: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings (highlighted), LAN settings, RS485 settings, and Login. The main content area is titled 'Date&Time settings'. It contains several sections: 'Board Date Wednesday 12/02/2020' with dropdowns for Wednesday, 12, 02, and 2020; 'Board Time 13:14:21' with dropdowns for 13, 11, and 59; two buttons: 'Change Date and Time with above values' and 'Sync clock using your PC date and time'; 'Daylight Saving Time' with 'Auto adjust' set to 'Off'; 'NTP service' with 'Synchronize Date&Time' set to 'Off'; and 'Clock adj service' with 'Fine adjustment clock' set to 'Off'.

Daylight Saving Time

This panel shows the 'Daylight Saving Time' settings. It includes an 'Auto adjust' toggle switch currently set to 'On'. Below it, the 'Local Time Zone' is set to '(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna'. At the bottom is a 'Save DST Setup' button.

Daylight Saving Time (DST) is the practice of setting the clocks forward 1 hour from standard time during the summer months, and back again in the fall, in order to make better use of natural daylight.

Local Time Zone

The system clock must be on time. Select your country to get the correct time and date



IMPORTANT: save the settings with the button Save DST Setup.

NTP service

NTP service

Synchronize Date&Time
☒

Primary NTP Server

ntp1.inrim.it

ntp1.inrim.it

Secondary NTP Server

ntp2.inrim.it

ntp2.inrim.it

Sync through NTP Server every

7 day

at time

12

00

Next NTP sync date: 00-00-2000

Save NTP setup

Last sync results

UTC: ; Local Time:

Clear

Check NTP server

Sync now

A NTP service (Network Time Protocol) can be used to synchronize the time on devices across a network. A NTP time server is used to obtain the correct time from a time source and adjust the local time in each connecting device.

INRIM provides a synchronization service for informatic systems connected to the Internet, based on two primary NTP (Network Time Protocol) servers installed at the Time and Frequency Laboratory.

The INRIM NTP servers can be reached by means of the following addresses:

ntp1.inrim.it (193.204.114.232)

ntp2.inrim.it (193.204.114.233)



IMPORTANT: save the settings with the button Save NTP Setup.

Clock adj service

Clock adj service

Fine adjustment clock
☒

Clock adj

+

6

sec. every

4 day

Save fine adjustment clock

If the NP10 is not connected to the Internet and you need to synchronize the time, you can set a precise time adjustment.

RS485 settings

The screenshot shows the 'RS485 settings' page in the NP10 web interface. The sidebar on the left includes options like Device info, Device Configuration, Uploader, Player, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area displays the following settings:

- Device ID:** A slider control set to 1.
- Baud rate:** A dropdown menu set to 19200.
- Data bits:** A dropdown menu set to 8.
- Stop bits:** A dropdown menu set to 1.
- Parity bit:** A dropdown menu set to None.
- Chksum:** A dropdown menu set to Enabled.
- Response delay (ms):** A slider control set to 2.

An 'Apply' button is located at the bottom of the settings area.

Device ID : Address NP10 in the 485 bus. This address **MUST** be univocal, two devices with the same address can not co-exist on the same bus.

Response delay: Minimum delay between end of reception of the pack and delivery of the reply.

NP10 can be connected to an RS485 communication bus through a serial port, which is controlled from a master system or by a computer.

Due to interference from outside the serial line, one may find anomalous behaviour from part of the master system which could cause possible damage to NP10. To avoid this mishap one must take the following precautions:

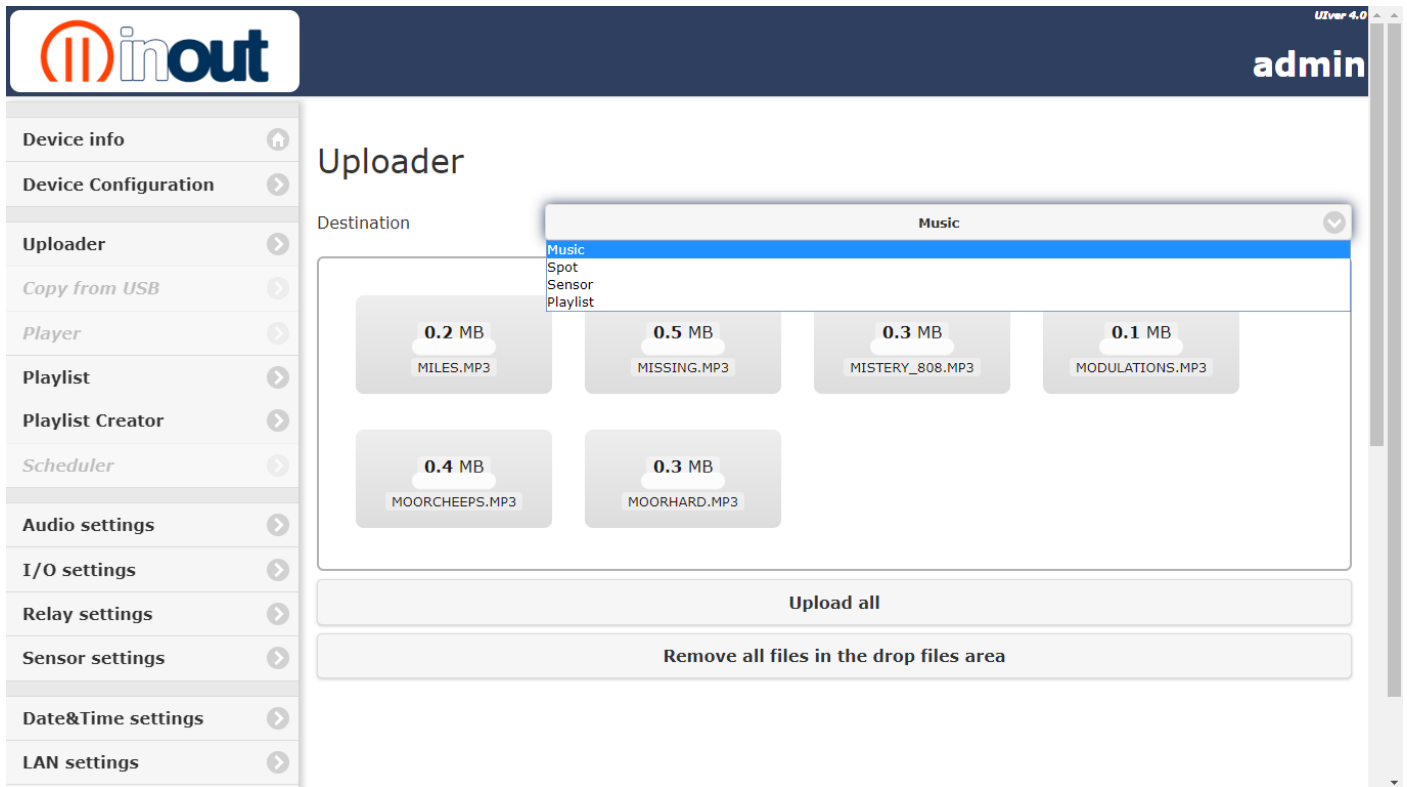
1. Do not let the serial cables transit in the same conduits as power cables or cables with elevated voltage. Maintain a safety distance of at least 10 cm. between these cables.
2. Connect serial cable screen to the ground the on one of the two sides (do not connect the screen from both sides); in addition, the ground connection of the screen must not be made in the same point in which piloted circuits of elevated tension are connected.
3. Cut the voltage of the entire system before beginning the wiring of the serial lines: even dispersed or parasite currents could damage the modules.



IMPORTANT:

- The internal electronics of NP10 are not galvanically insulated from the RS485 line; in case of short circuit or discharge to ground, it is possible to damage not only the NP10, but even the master system to which it is connected!
- For the RS485 connection, one must remember to ignore the transmission echo from the master that is returning through the serial line.

Uploader



To upload files into NP10, select the audio files on your computer/device, select dir/folder destination and press Upload all to copy into microSD storage.

Press Reset to abort Upload.

IMPORTANT:

- Before you start Upload, close all other web pages. During the Upload function, do not navigate to other NP10 features and do not open other browser web pages.
- Do not start Upload while running a scheduler
- We recommend uploading when the NP10 is in standby mode.

Copy from USB

The screenshot shows the NP10 web interface. On the left is a sidebar menu with the following items: Device info, Device Configuration, Uploader, Copy from USB (highlighted), Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled 'Copy from USB'. It features a 'Destination' dropdown menu set to 'Spot'. Below this is a 'Show Title-Author-Genre' toggle switch set to 'On'. To the right of the toggle is a genre dropdown menu set to 'All genres' and a search bar with the placeholder text 'Find by title or author...'. Below these are 'Select all' and 'Deselect all' buttons. A list of four audio spots is displayed, each with a right arrow button: 1. Spot 30 second-2 - Demo Spot 30 - Spot - Other, 2. Spot 15 second - Demo Spot 15 - Spot - Other, 3. Spot 25 second - Demo Spot 25 - Spot - Other, and 4. Spot 30 second-1 - Demo Spot 30 - Spot - Other. At the bottom of the main content area is a large 'Copy' button.

To copy files into NP10, insert USB pen drive, select the audio files, select dir/folder destination and press Copy to transfer files into microSD storage.

If the Copy from USB menu does not appear, refresh the web page.



IMPORTANT:

- The files to be transferred must be in the root directory of the USB pen drive
- Do not start Copy while running a scheduler
- We recommend Copy from USB when the NP10 is in standby mode

How to update the Bootloader (BL) or Application (App) Firmware?

If you have an NP10 device with the BL firmware version equal or less to the version "A.3", and the App with version equal or less to the version "3.0.2", it is necessary to follow the below instructions.

To update the newest firmware versions is it possible to use this web page for both: Bootloader and Application.

inout admin

Firmware Update

This web page gives the possibility to upload the application firmware in the SD memory and execute their updating.

1. Select the update file, using the text box below.
2. Press the Upload button to upload it to the SD memory.
3. When the file will be uploaded, the application will execute the updating process.

Do not interrupt this process as it might cause corruption, which will make your NP10 device unstable.

Your device reboots after the firmware is uploaded. It will take not more than 4 minutes.

If the updating process will conclude successfully, the update file in the SD memory will be deleted.

This process manages one file at a time.

Application Firmware

Upload

The process uploads the file in the SD card memory, inside the directory "updates", check the file integrity using the CRC info and then decrypt the data and write them in the Flash area. Instead, in the App, after the integrity check will recall a sw reset, in order to execute the bootloader that will find the file in the "updates" directory. For both process, at the end, in case of success, the update file will be deleted.

IMPORTANT:

To update firmware wait 4 minutes, after it is recommended to switch off and on NP10 device.

USB Firmware Update (optional)

1. Update the App firmware using the well know USB method, saving in the USB Flash root the file "dASys_F4_v3.x.xx.bin".
2. Plug the USB Flash memory to the NP10 device.
3. Power on the NP10 device and wait 4 minute. The original BL update the App firmware version using the file "dASys_F4_v3.x.xx.bin".

Service

The screenshot shows the 'Service' section of the Minout NP10 web interface. On the left is a sidebar with various configuration options. The main area has a 'Service' title and a dropdown menu for 'Parameters file saved in:' with 'SD' selected. Below the dropdown are five buttons: 'Backup', 'Restore', 'System Reboot', 'System Reboot and Scan SD content', and 'Factory default'.

Backup : Save your player configuration into microSD or USB Key.

Restore : Restore your player configuration saved in the microSD or USB Key.

System Reboot: remotely reboot the player

**System Reboot:
and scan SD** restart the player remotely and scan the files contained in the microSD memory

Factory default: restore the factory parameters

Standard Player configuration

NP10 works just like a standard player in this mode and does not require any specific programming or playlist file. The tracks will be played in the sequence in which they are memorised in the flash memory; if a block of data is transferred then the written sequence in the flash memory will depend on the operating system used.







Digital I/O Mode > Free

Logic ports are freely configurable as I/O settings webpage.

Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
IO1	OFF	OFF				IN
IO2	OFF	OFF		OFF	Play	OUT
IO3	OFF	OFF	1500	ON	Play	OUT
IO4	OFF	ON		OFF	Play + Blink in Pause	OUT
IO5	OFF	OFF	600	ON	Play+Sensor	OUT
IO6	OFF	ON			Blink in Play	OUT
IO7	OFF	OFF	3500	ON	Play	OUT
IO8	OFF	OFF		OFF	Blink in Stop	OUT

Digital I/O Mode > Player

The logical inputs can be used for player control (see example application at the end of guide).

IO1		previous file
IO2		Stop file reproduction.
IO3		Play/Pause file
IO4		next file
IO5		reduce output volume
IO6		increase output volume
IO7		free - logic ports are freely configurable as I/O settings webpage.
IO8		free - logic ports are freely configurable as I/O settings webpage.

Time Persistence: set the persistence time of the input command (time to wait before NP10 is able to interpret the input command)

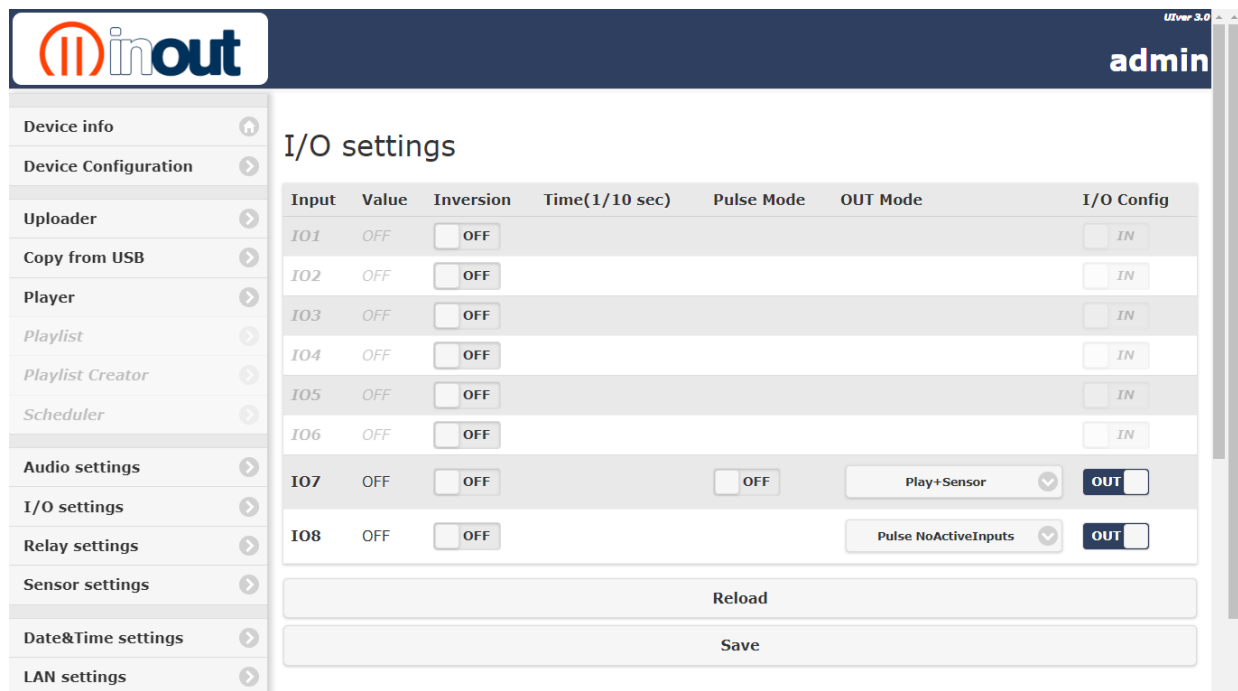
Power On Auto Play: In this mode, NP10 will automatically start to play the audio file when the device is power on.

Random play: ON = Random play is a music folder playback mode in which songs are played in a random order that is decided for all tracks at once.
After playing the last song, a new random sequence is generated
OFF = execution of all songs in the order in which they are stored

Restart Track Stopped: ON = If the track is interrupted, the next playback restarts from the beginning of the track.
OFF = playback restarts from the next track



IMPORTANT: save the settings with the button apply/save



Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
IO1	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO2	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO3	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO4	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO5	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO6	OFF	<input type="checkbox"/> OFF				<input type="checkbox"/> IN
IO7	OFF	<input type="checkbox"/> OFF		<input type="checkbox"/> OFF	Play+Sensor	<input checked="" type="checkbox"/> OUT
IO8	OFF	<input type="checkbox"/> OFF			Pulse NoActiveInputs	<input checked="" type="checkbox"/> OUT

Reload

Save

Pulse No Active Inputs: It allows the continuous reproduction of tracks with the play contact. When you disable the play contact, an output pulse commands the stop.
NB. Only for Standard Player and Playlist Sequence Configuration.

Playlist Sequence Configuration

This sequentially performs all the playlists memorised, starting first playlist.

The screenshot shows the 'minout' web interface for 'Device Configuration'. The left sidebar lists various settings: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled 'Device Configuration' and includes the following settings:

- Device Configuration:** A dropdown menu set to 'Playlist Sequence'.
- Digital I/O Mode:** A dropdown menu set to 'Player'.
- Play Delay (msec):** A slider set to 0.
- Digital Inputs:**
 - Time Persistence (msec):** A slider set to 100.
- Power On Auto Play:** A toggle switch set to 'Off'.
- Random Play:** A toggle switch set to 'On'.
- Restart track stopped:** A toggle switch set to 'Off'.
- Save:** A button at the bottom of the configuration area.

Digital I/O Mode > Free

Logic ports are freely configurable as I/O settings webpage.







The screenshot shows the 'minout' web interface for 'I/O settings'. The left sidebar is the same as the previous screenshot. The main content area is titled 'I/O settings' and displays a table of digital input/output configurations. The table has the following columns: Input, Value, Inversion, Time(1/10 sec), Pulse Mode, OUT Mode, and I/O Config.

Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
IO1	OFF	OFF				IN
IO2	OFF	OFF		OFF	Play	OUT
IO3	OFF	OFF	1500	ON	Play	OUT
IO4	OFF	ON		OFF	Play + Blink in Pause	OUT
IO5	OFF	OFF	600	ON	Play+Sensor	OUT
IO6	OFF	ON			Blink in Play	OUT
IO7	OFF	OFF	3500	ON	Play	OUT
IO8	OFF	OFF		OFF	Blink in Stop	OUT

At the bottom of the table is a 'Reload' button.

Digital I/O Mode > Player

The logical inputs can be used for player control (see example application at the end of guide).

IO1		previous file
IO2		Stop file reproduction.
IO3		Play/Pause file
IO4		next file
IO5		reduce output volume
IO6		increase output volume
IO7		free - logic ports are freely configurable as I/O settings webpage.
IO8		free - logic ports are freely configurable as I/O settings webpage.

Time Persistence: set the persistence time of the input command (time to wait before NP10 is able to interpret the input command)

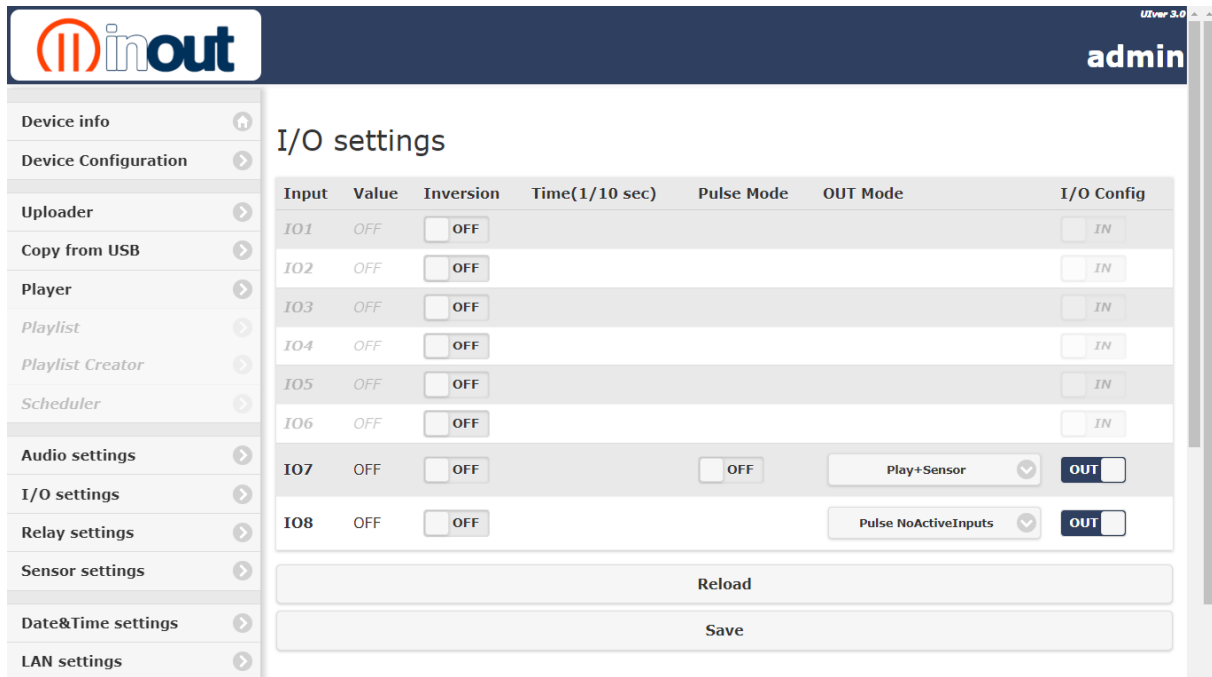
Power On Auto Play: In this mode, NP10 will automatically start to play the audio file when the device is power on.

Random play: ON = random play of individual playlists.
After playing the last playlist, a new random sequence is generated
OFF = sequence playlist as displayed on the web page.

Restart Track Stopped: ON = If the track is interrupted, the next playback restarts from the beginning of the track.
OFF = playback restarts from the next track



IMPORTANT: - save the settings with the button apply/save
- set continuous play ON for playlist loop



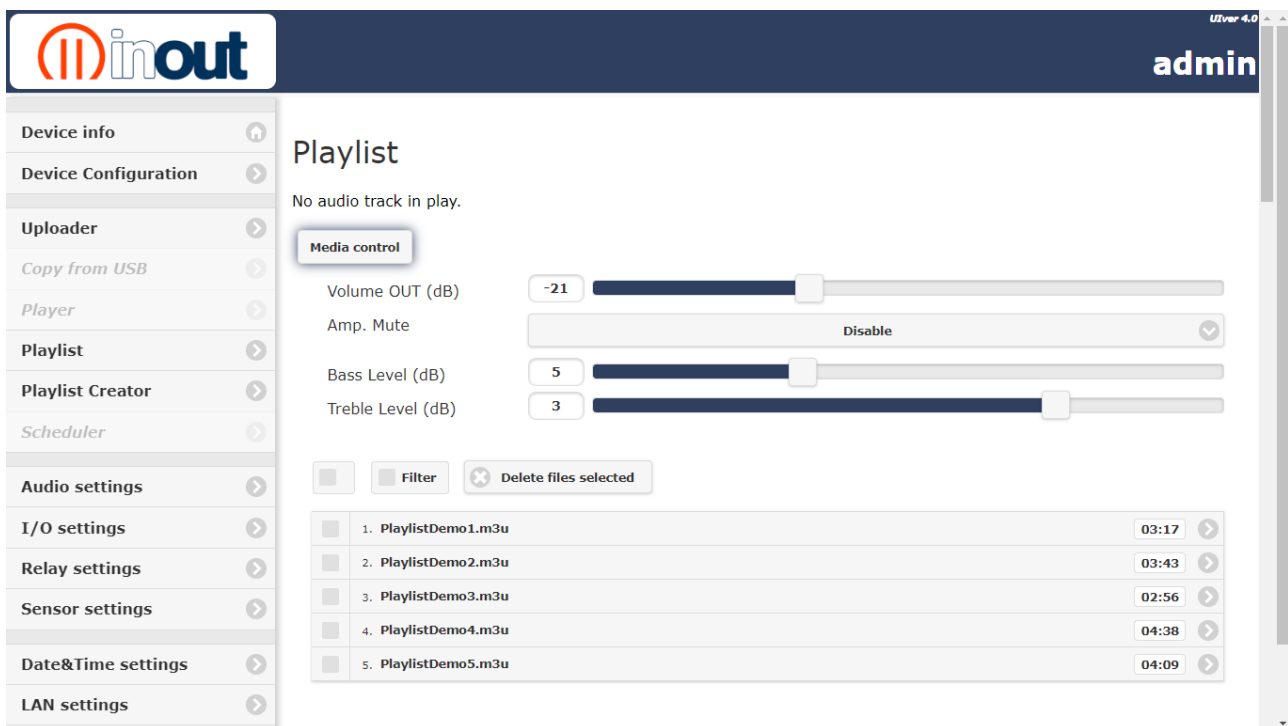
Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
IO1	OFF	OFF				IN
IO2	OFF	OFF				IN
IO3	OFF	OFF				IN
IO4	OFF	OFF				IN
IO5	OFF	OFF				IN
IO6	OFF	OFF				IN
IO7	OFF	OFF		OFF	Play+Sensor	OUT
IO8	OFF	OFF			Pulse NoActiveInputs	OUT

Reload

Save

Pulse No Active Inputs: It allows the continuous reproduction of tracks with the play contact. When you disable the play contact, an output pulse commands the stop.
NB. Only for Standard Player and Playlist Sequence Configuration.

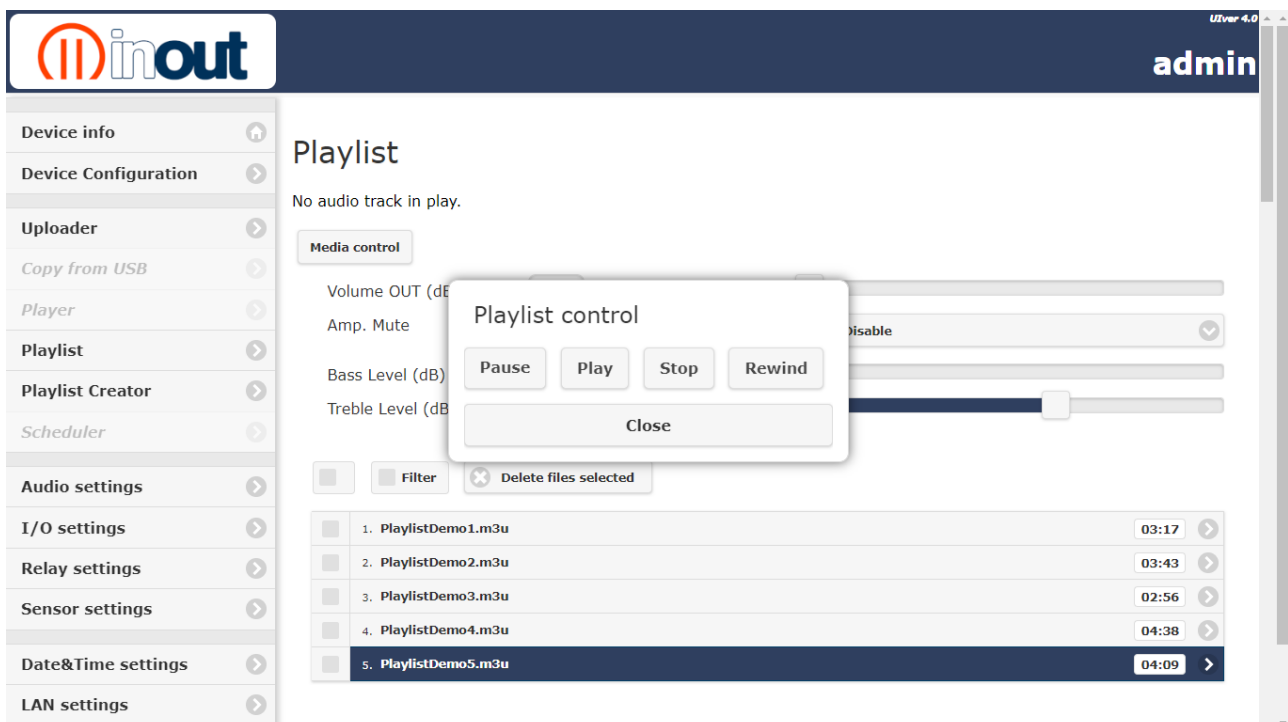
Select a playlist from the “Playlist” web page.



The screenshot shows the Minout web interface. The top header features the Minout logo on the left and the word "admin" on the right. A left sidebar contains a menu with items: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled "Playlist" and displays "No audio track in play." Below this is a "Media control" section with sliders for Volume OUT (dB) at -21, Amp. Mute set to "Disable", Bass Level (dB) at 5, and Treble Level (dB) at 3. At the bottom, there is a table of five demo playlists, each with a checkbox, a name, and a duration. The fifth playlist, "PlaylistDemo5.m3u", is highlighted.

<input type="checkbox"/>	1. PlaylistDemo1.m3u	03:17
<input type="checkbox"/>	2. PlaylistDemo2.m3u	03:43
<input type="checkbox"/>	3. PlaylistDemo3.m3u	02:56
<input type="checkbox"/>	4. PlaylistDemo4.m3u	04:38
<input type="checkbox"/>	5. PlaylistDemo5.m3u	04:09

Click on the selected playlist to start the Playlist Control pop-up



This screenshot shows the same Minout web interface as before, but with a "Playlist control" pop-up window open in the center. The pop-up contains four buttons: "Pause", "Play", "Stop", and "Rewind", along with a "Close" button at the bottom. The background interface remains the same, with the fifth playlist, "PlaylistDemo5.m3u", still highlighted in the table.

Advanced Player Configuration

The screenshot shows the 'inout' admin interface. The left sidebar contains a list of settings: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled 'Device Configuration'. It features a dropdown menu for 'Device Configuration' set to 'Advanced Player'. Below it, 'Digital I/O Mode' is set to 'Binary Code'. A dropdown menu is open for 'Digital I/O Mode', showing 'Binary Code', 'Keypad', and 'Museum mode'. The 'Binary Code' option is selected. Below this, there are sliders for 'Play Delay (msec)' (set to 100), '# bits for Binary Code (1-8)' (set to 4), and 'Time Persistence (msec)' (set to 100). There are also toggle switches for 'Continuous Play' (On), 'Interrupt' (On), and 'Restart Play' (Off). A 'Save' button is at the bottom.

Digital I/O Mode > Binary Code

Activating the inputs in binary combination, one can launch the playing of a maximum of 255 file, naming the audio files es. 1.mp3, 2.mp3, 3.mp3.....255.mp3

Digital I/O Mode > Keypad (12-key telephone keypad)

Dedicated operation for telephone keypad connection 12 keys. All I/O ports are dedicated to this function (see example application at the end of guide).

Naming the audio files es. 1.mp3, 2.mp3, 3.mp3.....999.mp3

Digital I/O Mode > Museum Mode

Activating the inputs in binary combination, one can launch the playing of a maximum of 63 file, naming the audio files es. 1.mp3, 2.mp3, 3.mp3.....63.mp3.

I/O7 and I/O8 reserved:

IO7  reduce output volume

IO8  increase output volume



IMPORTANT: save the settings with the button apply/save

Digital Inputs Set

Digital Inputs Dedicated inputs for Playlist Direct or Binary Code, the remaining ones can
bits for be configured as outputs

Time Persistence: Set the persistence time of the input command (time to wait before NP10 is able to interpret the input command).

Continuos Play: - OFF: Having terminated the playing of the codified file, requested from the input code, NP10 goes in standby.
- ON: The requested codified file is continuously played until the relevant input code is inserted.

Interrupt: - OFF: Repeated activations or deactivations of the same input or of other inputs does not influence the playing of the file.
- ON: The activation of a different code can block the playing underway and activate the playing of the new requested file

Restart Play: In the moment in which an input code is enabled the playing of the of the
(if Interrupt is ON) relevant file from its beginning takes place, even if it is already in play.



IMPORTANT: save the settings with the button apply/save

Advanced Playlist Configuration

Digital I/O Mode > Playlist Direct

The 8 available playlists, activated by the logical inputs IN1-IN8, can be played with different modes, depending upon the varying needs.

Digital I/O Mode > Binary Code

Activating the inputs in binary combination, one can launch the playing of a maximum of 255 playlists.

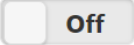




To combine playlists with their inputs, rename playlist names as follows (use clone button with playlist creator web page):

Playlist Direct

Binary Code Playlist

Input	Name playlist	Input	Name playlist
IN1	1_nameplaylist.m3u	IN1+IN2	3_nameplaylist.m3u
IN2	2_nameplaylist.m3u	IN1+IN4	9_nameplaylist.m3u
IN3	3_nameplaylist.m3u	IN5	16_nameplaylist.m3u
IN4	4_nameplaylist.m3u	IN2+IN4+IN5	26_nameplaylist.m3u
IN5	5_nameplaylist.m3u	IN6	32_nameplaylist.m3u
IN6	6_nameplaylist.m3u	IN2+IN5+IN6	50_nameplaylist.m3u
IN7	7_nameplaylist.m3u	IN1+IN4+IN5+IN6	57_nameplaylist.m3u
IN8	8_nameplaylist.m3u	IN3+IN4+IN5+IN6	60_nameplaylist.m3u

Digital Inputs Set

- Digital Inputs**
bits for: Dedicated inputs for Playlist Direct or Binary Code, the remaining ones can be configured as outputs
- Time Persistence:** Set the persistence time of the input command (time to wait before NP10 is able to interpret the input command).
- Continuous Play:**
 Off
- Activated the input, the relative item in the Playlist is played: at the end of it, NP10 goes in standby, awaiting a further activation.
 - The position of the last item played is stored in memory, in order to start out again always by the next one in case of restart.
- Continuous Play:**
 On
- Activated the input, the relative item in the Playlist is played: at the end of it, NP10 goes in standby, awaiting a further activation. Activating the input once again or if the activation remains, the successive file is played.
 - The playlist is activated in loop, as long as the activation of the relative logical input remains activated.
 - The position of the last item played is stored in memory, in order to start out again always by the next one in case of restart.
- Interrupt:**
 Off
- Repeated activations or deactivations of the same input or of other inputs does not influence the playing of the file.
- Interrupt:**
 On
- Repeated activations or deactivations of the same logical input does not influence the playing of the file; only the activation of a different input blocks the playing underway and activates the relative playlist.
- Restart Play:**
 On
- From the moment that the same logical input is reactivated, the restart of the file is commanded, even if it is playing. The activation of a different input blocks the playing underway and activates the relative playlist.



IMPORTANT: save the settings with the button apply/save

Scheduler Configuration

The screenshot shows the Minout web interface. The top header includes the Minout logo and the word "admin". The left sidebar lists the following settings: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled "Device Configuration" and shows the "Scheduler" dropdown menu open, with options "Free" and "Priority message". The "Free" option is selected. Below the dropdown is a "Save" button.

Digital I/O Mode > Free

Logic ports are freely configurable as I/O settings webpage.

The screenshot shows the Minout web interface. The top header includes the Minout logo and the word "admin". The left sidebar lists the following settings: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled "I/O settings" and shows a table with the following columns: Input, Value, Inversion, Time(1/10 sec), Pulse Mode, OUT Mode, and I/O Config. The table contains 8 rows of data for inputs I01 through I08.

Input	Value	Inversion	Time(1/10 sec)	Pulse Mode	OUT Mode	I/O Config
I01	OFF	OFF				IN
I02	OFF	OFF		OFF	Play	OUT
I03	OFF	OFF	1500	ON	Play	OUT
I04	OFF	ON		OFF	Play + Blink in Pause	OUT
I05	OFF	OFF	600	ON	Play+Sensor	OUT
I06	OFF	ON			Blink in Play	OUT
I07	OFF	OFF	3500	ON	Play	OUT
I08	OFF	OFF		OFF	Blink in Stop	OUT

Below the table is a "Reload" button.

Digital I/O Mode > Priority message

Activating the inputs in binary combination, one can launch the playing of a maximum of 63 priority message, naming the audio files es. 1.mp3, 2.mp3, 3.mp3.....63.mp3

The remaining logic ports can be configured as outputs

I/O7 and I/O8 reserved:

IO7: If active input, the line in is enabled and mixes in the background during the playback program's audio file.

When disabled, the audio line in is turned off.

IO8: If enable, suspends the program scheduler and playback of audio files.

When disabled, resumes the audio playback of the scheduler from the point established of the time line program

Play Delay: Setting the delay time of the playback audio file from the activation of the inputs



IMPORTANT: save the settings with the button apply/save

- Scheduler files:** Name of the selected scheduler program
- Enable:** If active, enable the scheduler. / If switched off, the program is suspended.
- Delete:** to clear the scheduler program
- Create new:** to create a new scheduler and save name
- Create clone:** to clone a schedule and place it on another date
- Scheduler type:** for scheduling:
 - every day
 - weekly, enabling the days of reproduction
 - monthly
 - specific day scheduler.
- Save:** to save the scheduler program
- Undo:** undoes the last action performed
- Add Playlist:** Press to insert playlist of songs
- Add BGM music:** Press to insert Random Background Music.
- Press to insert a title, value issued if ON / OFF, and the intervention time.
 ON = green ball
OFF = red ball
- Add Spot:** Press to insert a single commercial spot or an auto-repeat for n times and a range between them.
- Add Event:** Press to insert a timed event: Relay, logic output and audio line-in.
- Press to insert a title, choose output type, value output if ON / OFF, and the intervention time.
 ON = green ball
OFF = red ball



IMPORTANT: to display output ID, configure logic ports as outputs in I/O settings page

Scheduler

Audio settings

I/O settings

Relay settings

Date&Time settings

LAN settings

RS485 settings

Login

Firmware update

Service

+

 Add Playlist

+

 Add Background Music

+

 Add Spot

+

 Add Event

Board Time/Date 12:00:23 , Tuesday 09/06/2020
Status: play **Audio Track:** ATMOSPHERE.MP3 **Playlist:** DemoPlaylist1.m3u **Scheduler:** Demoscheduler1200

TimeLine

12:00:00

Relay 12:00:00 ON Relay

Time event, relay ON

12:00:01

DemoPlaylist1.m3u - 00h03m43s
12:00:01 - 12:04:25

Music playlist

12:00:44

Spot 01-15sec.mp3 - 00h00m15s
12:00:44 - 12:00:59

Commercial spot 1

12:00:59

Spot 02-25sec.mp3 - 00h00m26s
12:03:00 - 12:03:26

Commercial spot 2

12:03:26

OUT6 12:04:29 ON OUTPUT 6

Time event, output ON

12:04:25

Chime1.mp3 - 00h00m06s
12:04:30 - 12:04:36

Intro Spot

12:04:29

Bgm 12:04:41 ON BGM Music

Random background music ON

12:04:30

Spot 02-25sec.mp3 - 00h00m26s
13:00:00 - 13:00:26

Commercial spot

12:04:36

OUT6 13:30:00 OFF OUTPUT 6

Time event, output OFF

12:04:41

Relay 14:00:00 OFF Relay

Time event, relay OFF

13:00:00

Bgm 14:00:01 OFF BGM Music

Random background music OFF

13:00:26

OUT6 13:30:00 OFF OUTPUT 6

Time event, output OFF

13:30:00

Relay 14:00:00 OFF Relay

Time event, relay OFF

14:00:00

Bgm 14:00:01 OFF BGM Music

Random background music OFF

14:00:01

OUT6 13:30:00 OFF OUTPUT 6

Time event, output OFF

IMPORTANT.

Pay attention to following advice:

We recommend you to create a new scheduler instead of editing and deleting a scheduler file in memory.

In case of incorrect webpage views, refresh the page by clicking on the InOut logo

Be careful about programming, overlapping schedules can generate errors.

Player - listening to audio files

mInout admin

Player

No audio track in play.

Media control

Volume OUT (dB)

Amp. Mute

Bass Level (dB)

Treble Level (dB)

Music **Spot** **Sensor**

Show files names

☐ Filter

File Name	Duration
9. ANALIZE.MP3	00:26
10. ARKANOID.MP3	00:48
11. ATMOSPHERE.MP3	00:42
12. BASS&DRUM.MP3	00:48
13. BATMAN.MP3	00:44
14. BLUEX.MP3	00:50
15. CLAPTON.MP3	00:44

To listen to the stored files in the uSD, select the Music, Spot and Sensor folders, click on the file name to view pop up with the commands.

Press the media control button, further commands and level adjustments are available.

mInout admin

Player

Status: play Audio Track: ATMOSPHERE.MP3

Media control

Music **Spot** **Sensor**

Show files names

☐ Filter

ATMOSPHERE.MP3

TAGS: Atmosphere / AAVV Music / Music / Other

File Name	Duration
10. ARKANOID.MP3	00:48
11. ATMOSPHERE.MP3	00:42
12. BASS&DRUM.MP3	00:48
13. BATMAN.MP3	00:44
14. BLUEX.MP3	00:50
15. CLAPTON.MP3	00:44
16. CLUB FUNKY.MP3	00:39
17. DARK.MP3	00:59
18. EXHALE.MP3	00:56
19. FLASHTRANCE.MP3	00:26
20. IN1 1.mp3	00:09

View and search file/song

The screenshot displays the 'inout' software interface, version 4.0. The left sidebar lists various system and media management functions. The main window is focused on the 'Player' section, which is currently playing a track titled 'Bluex'. The 'Media control' area features three tabs: 'Music', 'Spot', and 'Sensor'. The 'Music' tab is selected, revealing a list of music tracks. Each track entry includes a checkbox, a track number, the track title, the artist/album information, and the track duration. A dropdown menu is open, showing options to view file names or tags by title, artist, album, or genre. A search bar is available for finding tracks by title, author, or album.

Press Show files name button to see ID3 TAG of audio file:

- Show files name
- Show TAGS by Title
- Show TAGS by Artist
- Show TAGS by Album
- Show TAGS by Genre

You can view tracks for genre music by pressing the appropriate button

In the box, you can search song by title, author and album

Delete file/song

With this flag/checkbox the first 20 files/track are selected, press Delete files selected button to remove the files from the uSD.

The screenshot shows the MPinout admin interface. The left sidebar contains navigation links: Device info, Device Configuration, Uploader, Copy from USB, Player, Playlist, Playlist Creator, Scheduler, Audio settings, I/O settings, Relay settings, Sensor settings, Date&Time settings, and LAN settings. The main content area is titled 'Player' and shows 'No audio track in play.' Below this is a 'Media control' section with tabs for Music, Spot, and Sensor. The Music tab is active, showing a list of 9 MP3 files. A 'Filter' checkbox is checked, and a 'Delete files selected' button is visible. The list of files is as follows:

File Name	Duration
1. ANALIZE.MP3	00:26
2. ARKANOID.MP3	00:48
3. ATMOSPHERE.MP3	00:42
4. BASS&DRUM.MP3	00:48
5. BATMAN.MP3	00:44
6. BLUEX.MP3	00:50
7. CLAPTON.MP3	00:44
8. CLUB FUNKY.MP3	00:39
9. DARK.MP3	00:59

If I enable the filter flag, you can act on the bar to delete a group of files/songs.

The screenshot shows the MPinout admin interface with the 'Player' section. The 'Filter' checkbox is checked, and a range bar is visible below the file list, indicating a selection from file 4 to file 10. The list of files is as follows:

File Name	Duration
2. ARKANOID.MP3	00:48
3. ATMOSPHERE.MP3	00:42
4. BASS&DRUM.MP3	00:48
5. BATMAN.MP3	00:44
6. BLUEX.MP3	00:50
7. CLAPTON.MP3	00:44
8. CLUB FUNKY.MP3	00:39
9. DARK.MP3	00:59
10. EXHALE.MP3	00:56
11. FLASHTRANCE.MP3	00:26
12. IN1_1.mp3	00:09

Listening playlist

Playlist

No audio track in play.

Media control

Volume OUT (dB) -21

Amp. Mute Auto

Bass Level (dB) 5

Treble Level (dB) 3

☐ ☐ Filter

<input type="checkbox"/>	1. PlaylistDemo1.m3u	03:17	>
<input type="checkbox"/>	2. PlaylistDemo2.m3u	03:43	>
<input type="checkbox"/>	3. PlaylistDemo3.m3u	02:56	>
<input type="checkbox"/>	4. PlaylistDemo4.m3u	04:38	>
<input type="checkbox"/>	5. PlaylistDemo5.m3u	04:09	>

To listen to the stored playlists, click on the playlist name to display the pop-up with the commands.

Press the media control button, further commands and level adjustments are available.



IMPORTANT: set continuous play ON for playlist loop

Playlist

Status: play Audio Track: ATMOSPHERE.MP3 Playlist: PlaylistDemo2.m3u

Media control

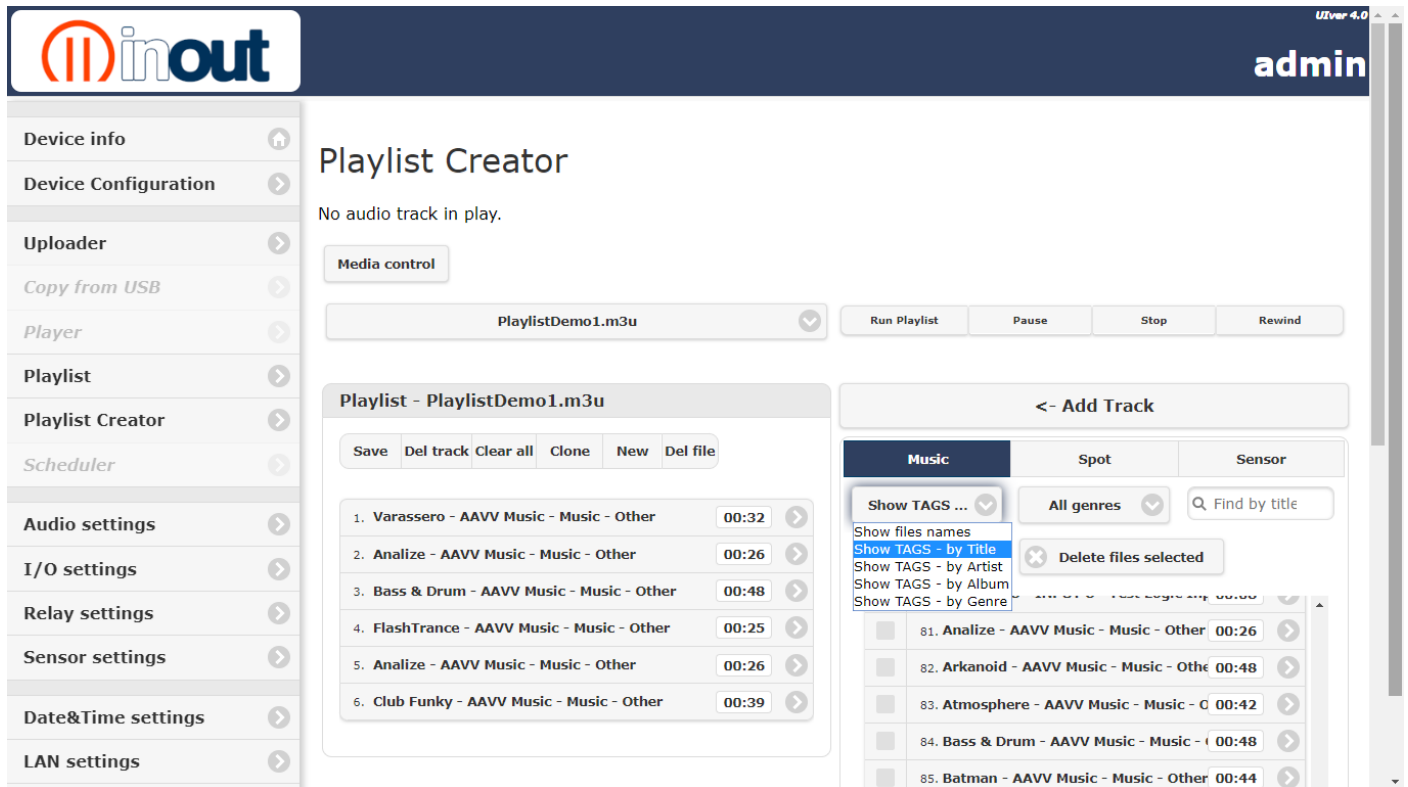
Playlist control

Pause Play Stop Rewind

Close

<input type="checkbox"/>	1. PlaylistDemo1.m3u	03:17	>
<input type="checkbox"/>	2. PlaylistDemo2.m3u	03:43	>
<input type="checkbox"/>	3. PlaylistDemo3.m3u	02:56	>
<input type="checkbox"/>	4. PlaylistDemo4.m3u	04:38	>
<input type="checkbox"/>	5. PlaylistDemo5.m3u	04:09	>

Playlist Creator (to create a new playlist)



Right list is the files stored in the uSD in Music, Spot and Sensor folders.

New: To create a new playlist, enter a name and press save

<-Add Track: To insert audio files into the playlist, press Add Track
To change the order of the files, drag the file to the desired location.

Del track: To delete the audio file from the playlist, select and press del track

Clear all: To delete all files into playlist

Del file: To delete the playlist

Clone: To copy the same playlist and give it a different name

Save: When the playlist is complete, press the Save button

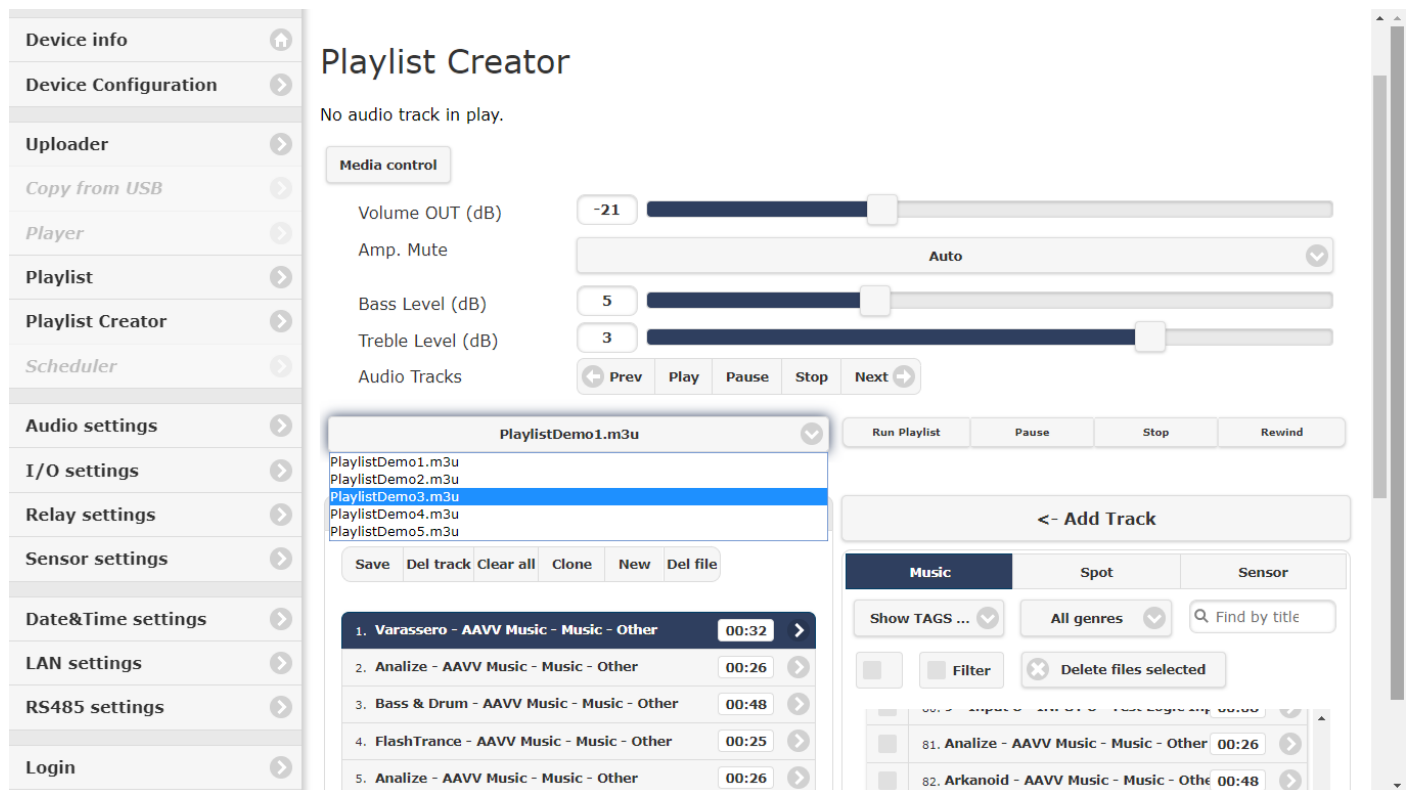
Press Show files name button to see ID3 TAG of audio file:

- Show files name
- Show TAGS by Title
- Show TAGS by Artist
- Show TAGS by Album
- Show TAGS by Genre

You can view tracks for genre music by pressing the appropriate button

In the box, you can search song by title, author and album

To listen a new playlist:



Run Playlist: to listen a playlists in memory, select playlist name and press Run playlist button.

Rewind: to listen the playlist from the beginning, press Rewind button.

Pause/Stop: Pause / Stop playlist

Media control

To scroll through the tracks quickly, additional commands are available by pressing the media control button

Prev previous file

Play Play file

Pause Pause file

Stop Stop file reproduction.

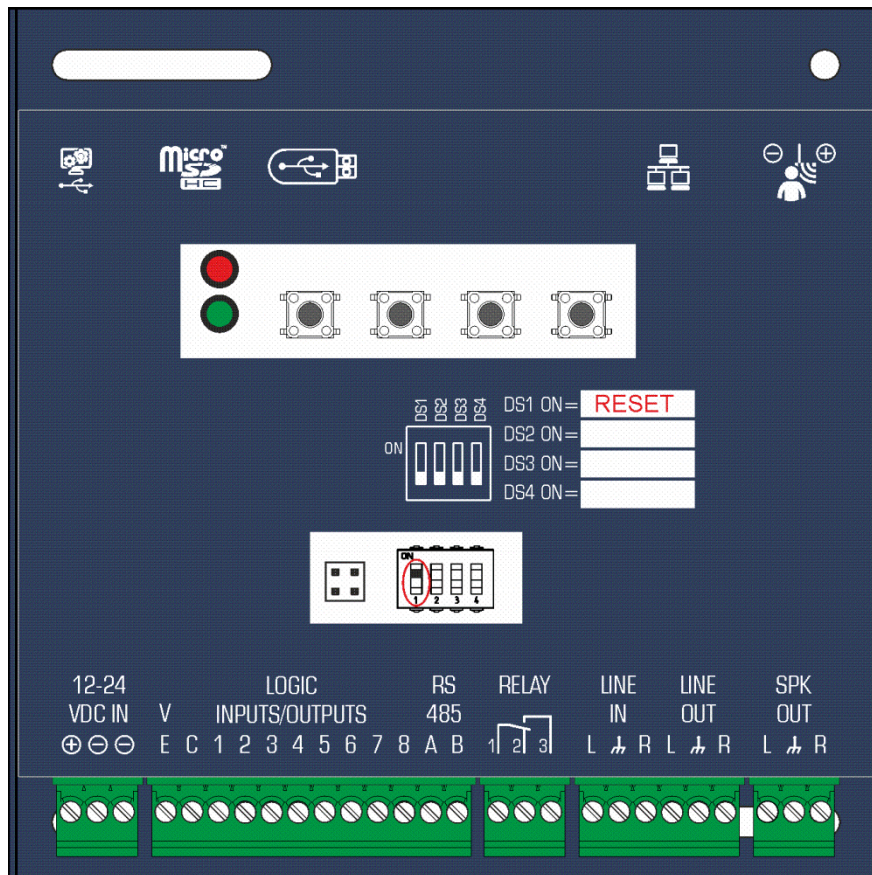
Next next file

Utility function

FACTORY RESET

To erase all data from your NP10 device (not the audio tracks of the microSD memory), remove the panel above and set DS1 ON.

Power on the NP10 device and wait 1 minute, after set DS1 OFF and place the panel on top.



Technical features

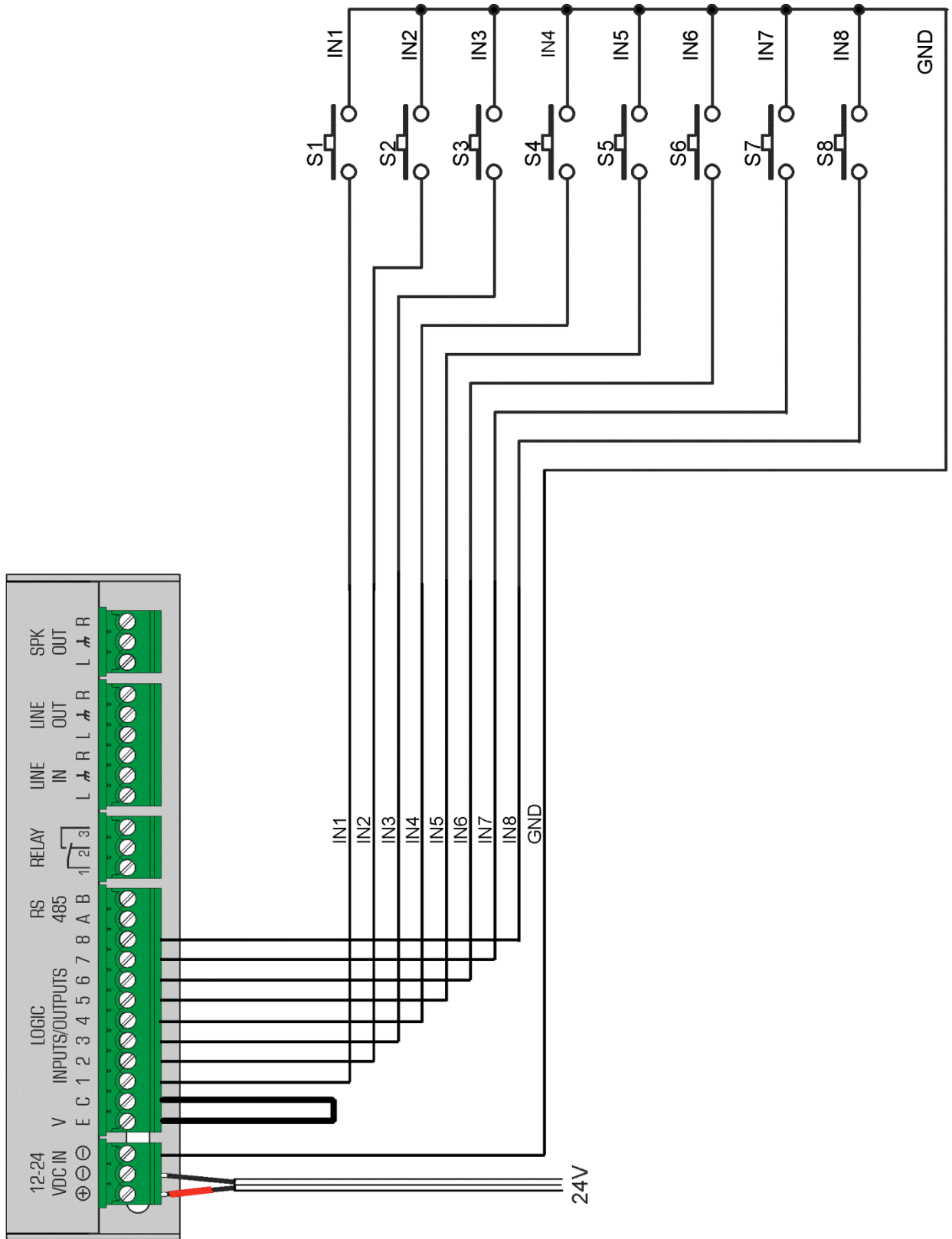
Power supply : 12÷24VDC. 40W
Consumption in standby : 0,8 W
Protection : inside fuse, 4A delayed.
Capacity of extractable memory : microSD from 4GB to 16GB (FAT/FAT32).
Input absorption..... : 5 mA
Relay contact Max.voltage.....: 1 A 30Vdc
Formats accepted : MPEG1 layer 3 (file MP3 from 64 to 360 Kbps)
Response in frequency : 20 ~ 20.000 Hz (±3dB)
Signal/noise ratio : > 90dB.
Harmonic distortion : < 0,1%
Output power..... : max. 20+20W (24V / 4 Ω) THD+N= 5%
Control keys : 4 buttons REW, PLAY/PAUSE, STOP, FWD.
Classification..... : IP 30 on the basis of liquid and dust penetration.
Size..... : 115 x 115 x 22mm.
Weight..... : 370 gr.
Packing (size and weight)..... : 230 x 180 x 80mm. / 890gr.
Operating temperature..... : 0 to +60°C.
Storage temperature.....:-20 to +60°C.

Manufactured by:  Noventa di Piave (VE) - ITALY



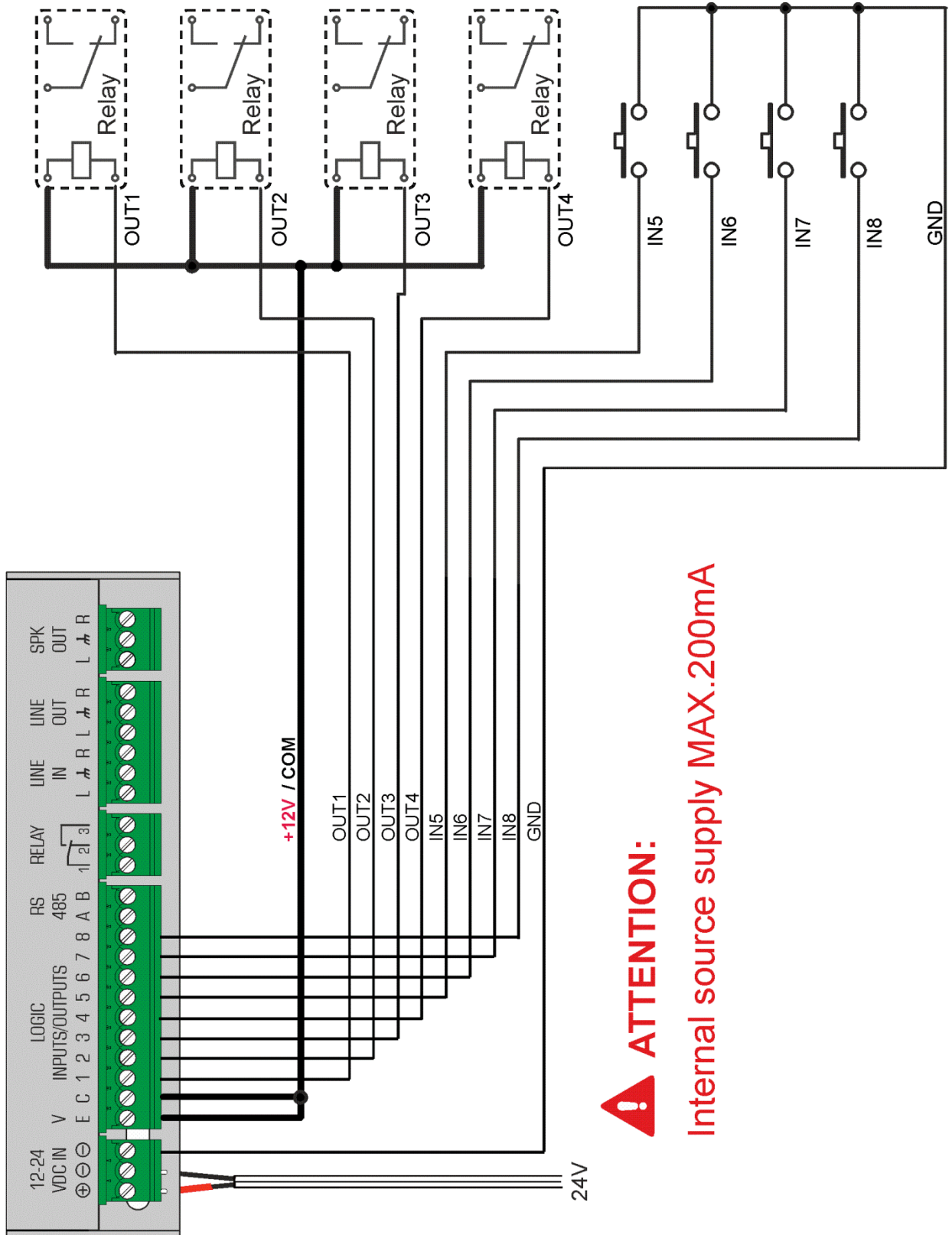
Product compliant with the safeguard regulations CE about safety and electromagnetic compatibility.

Application example: Advance Player with 8 input Binary code



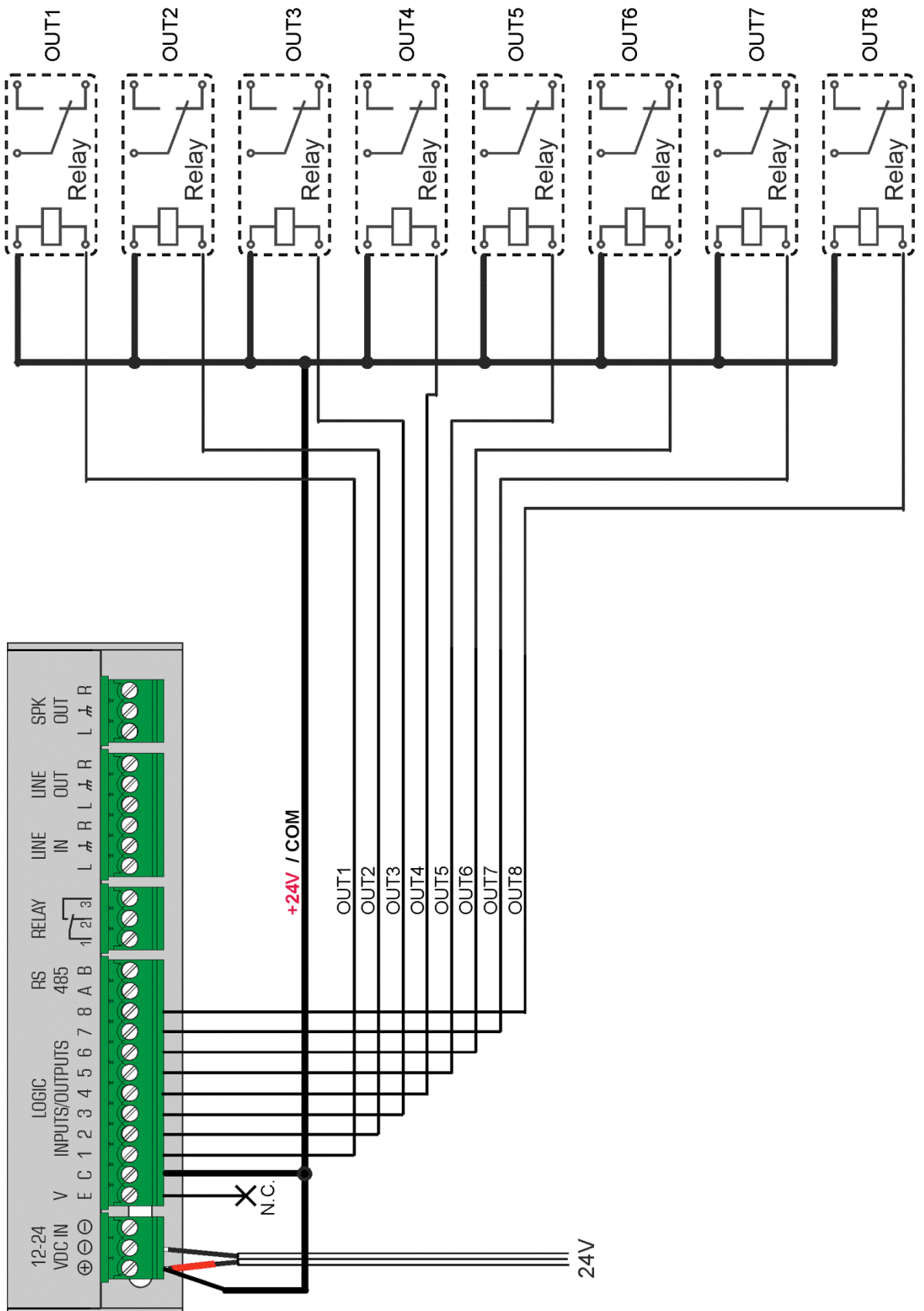
Application example:

Advance Player with 4 input and 4 output external Relay 12Vdc



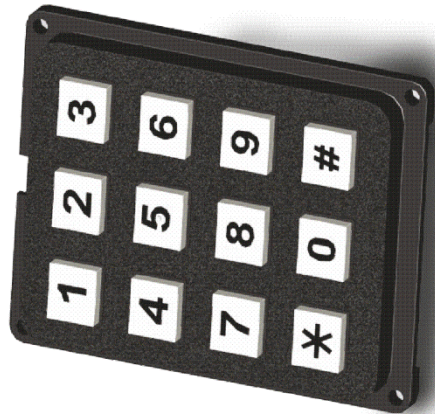
Application example:

Advance Player with 8 output external Relay 24Vdc

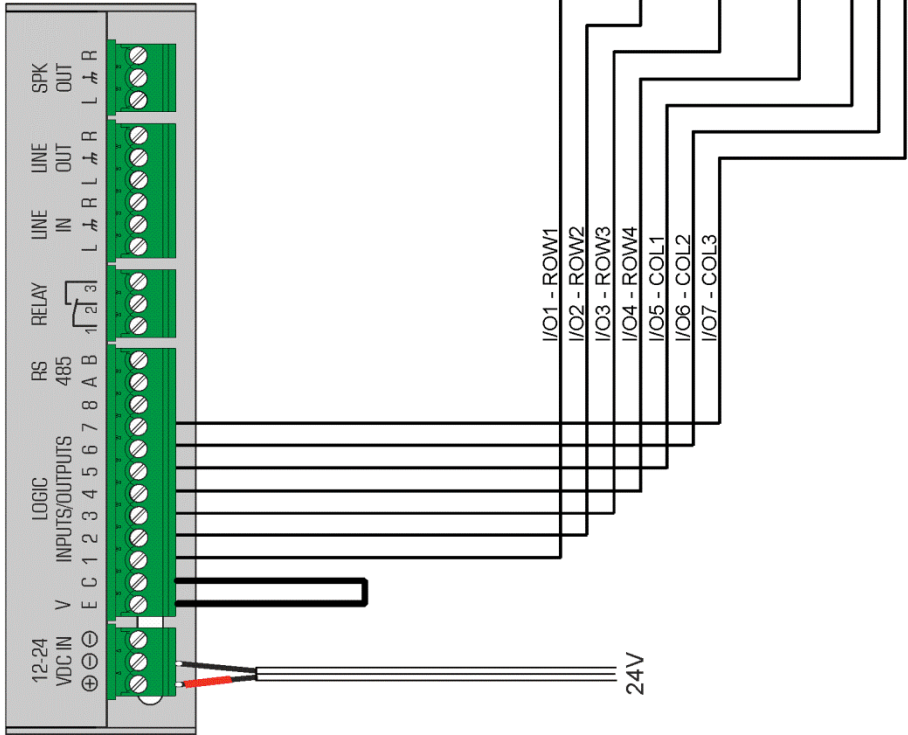


Application example:

Telephone keypad connection 12 keys



1	2	3	ROW1
4	5	6	ROW2
7	8	9	ROW3
*	0	#	ROW4
COL1	COL2	COL3	



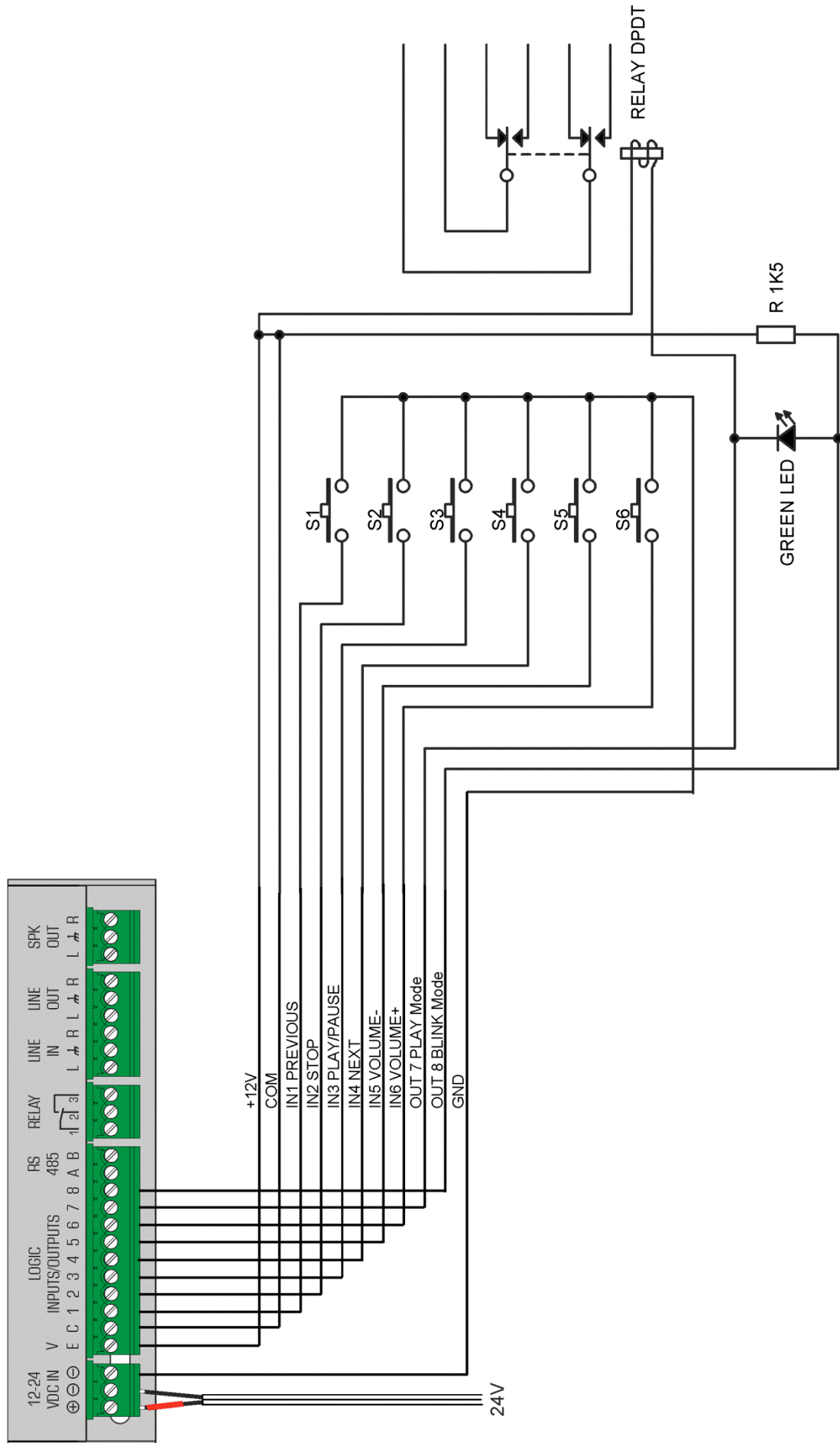
Enter the number and
press # to play audio file

Press # to stop audio file

If you've pressed a wrong number,
press * to reset

Application example:

Standard player with remote keys relay output & led blinking during pause



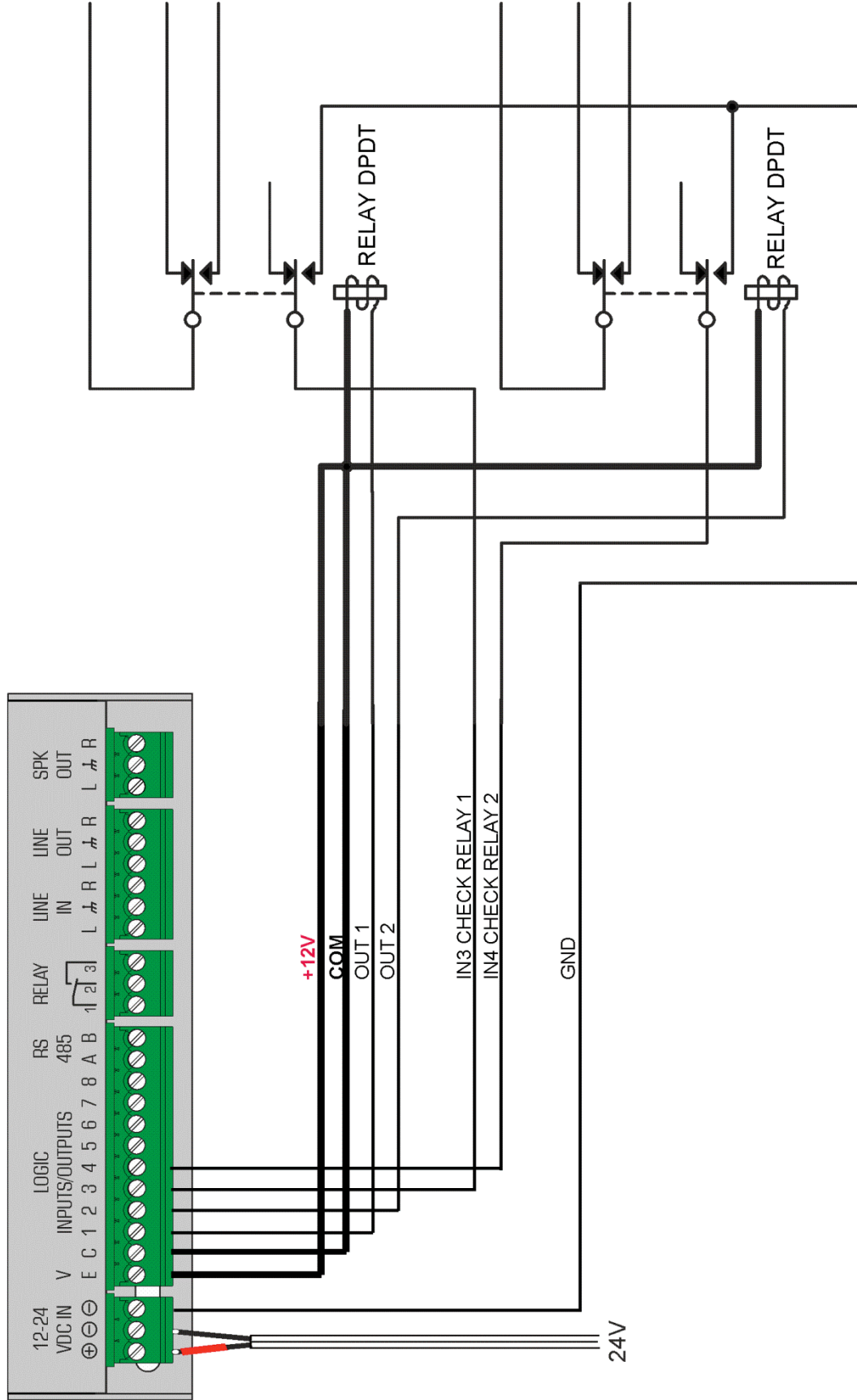
Application example:

External Relay 12Vdc with check



ATTENTION:

Internal source supply MAX.200mA



Application example: Standard player with automatic Stop

