BUCKLEY MUSIC SYSTEM
(PACKARD2MP3 adapter)
Installation manual

The Wallbox2 MP3 kit recreates the original operating conditions of your
Wallbox BUCKLEY Music Box

In less than 2 hours you will have achieved the installation and you'll be able to enjoy long
hours of music you have loaded in a simple SD card.
The selections will be issued as original by pressing one of the wallbox button.

The music will start after introducing a coin of 5 cents (nickel)

Kit contents :

- electronic management board
- link cable PCB / Wallbox (1.5m).
- 5 volt supply for the card and the wallbox
- Lot resistors to be installed in the wallbox
- 2 LED bulbs optional on request
- models for making labels for download on the site wallbox2mp3.com
(http://www.wallbox2mp3.com/en/software/)

Before performing the installation, you must ensure that the wallbox is fully operational, the
coin comparitor must accept coins to start musics.

The various contacts and the coin passage in the coin mechanism must be previously
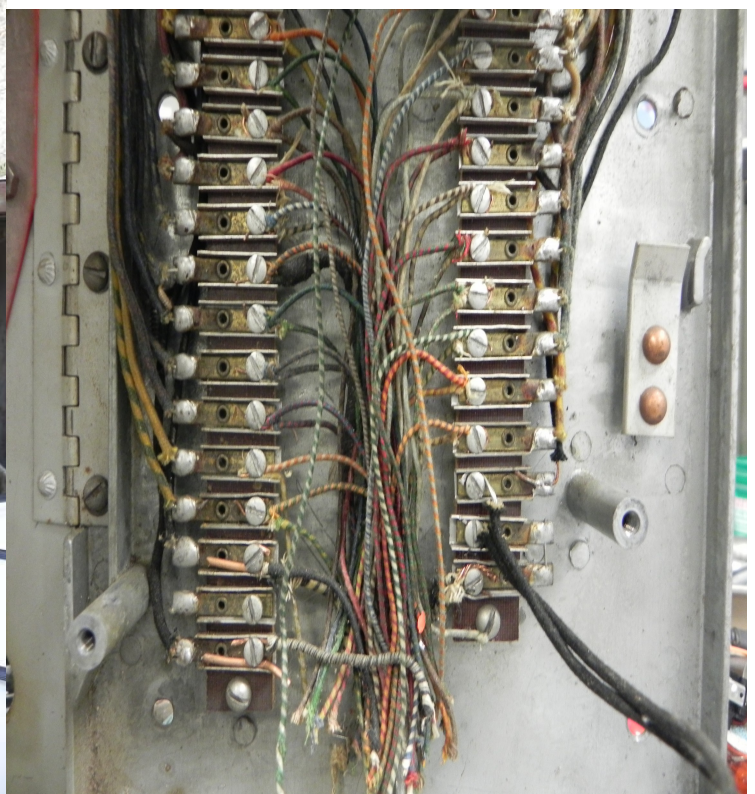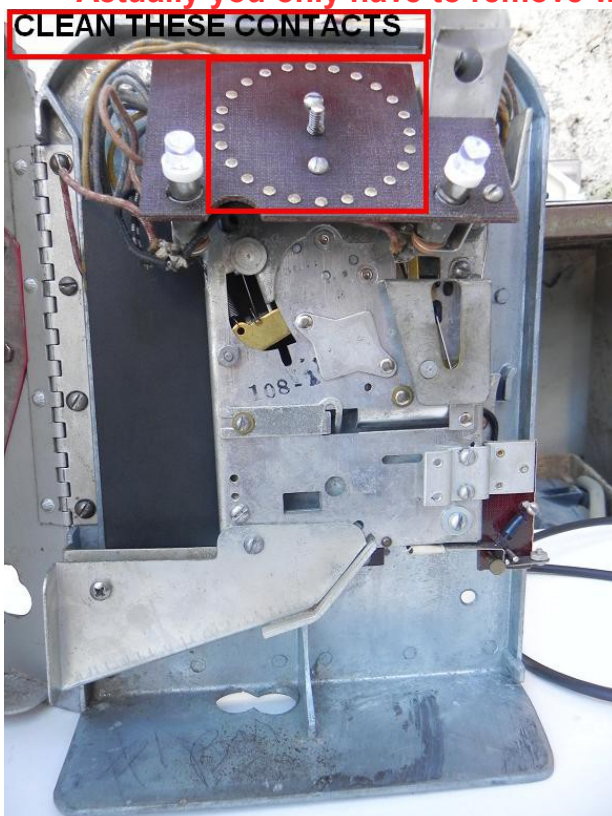cleaned.

We recommend a complete disassembly and cleaning of the packard before use.

Remove the coin acceptor to access to the connectors

The set will be stripped of its former potential wiring.
Let connected the two black wires at the bottom right that come from the coin acceptor.Also
keep the soldered wires (they come from lights and the selections wheel) .

Actually you only have to remove wires screwed on the terminals !!!!

Open and drop on your worktop the hardware content of the bag .

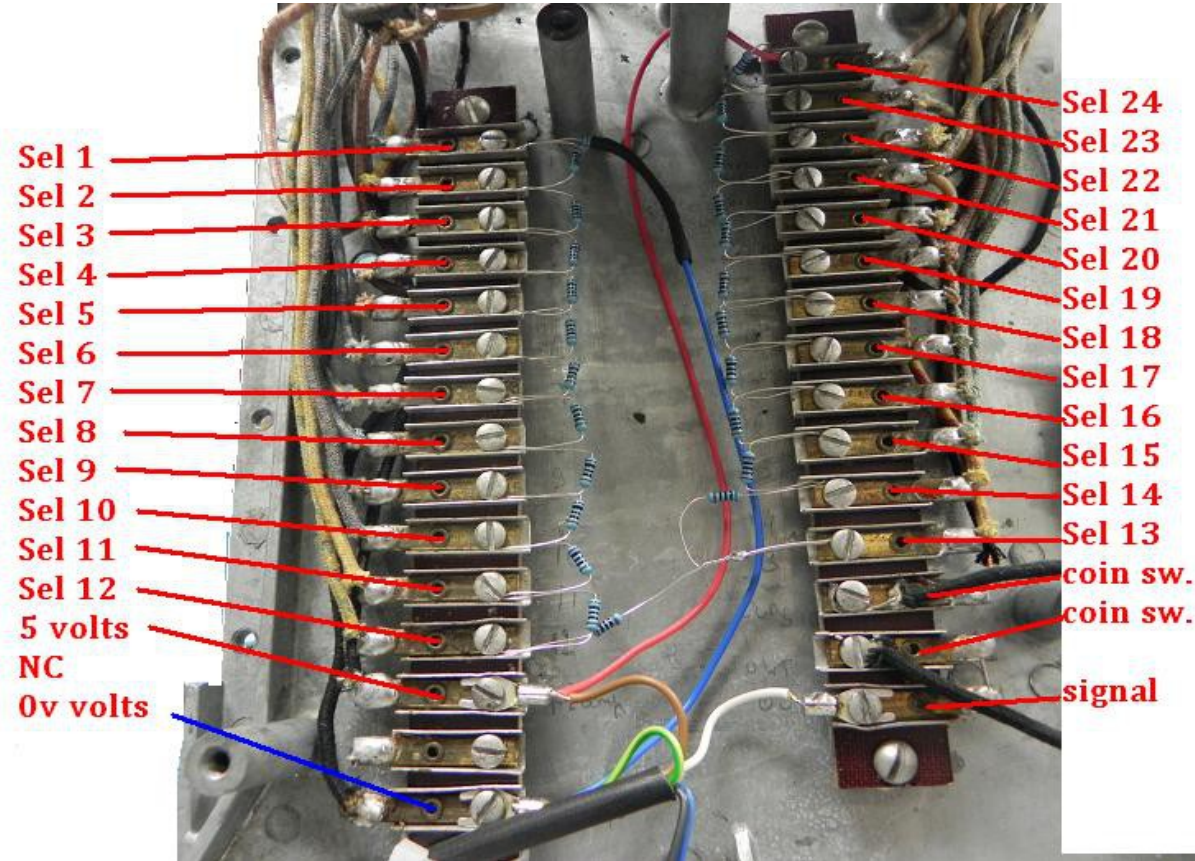Assemble the four spacers on the pcb legs ,place the cover and the screws

Open and drop on your worktop the content of the resistors and wires bag

Place your opened wallbox on your worktop and wire it that way :

Remove about 5 cm insulation from the ends of the 3-conductor cable provided. Connect to terminal " 0V " (at the bottom left) :
    1. the green wire of the 3-wire cable ,
    2. the free end of the blue wire with a resistance in a black jacket.
    3. the blue wire provided in addition (not visible in the photos), connect the other end of this wire to a metal part of the wallbox (using screws) to prevent unwanted selections (grounding of the wallbox).

twist the leg of one of the 24 supplied resistors (Note: resistors have no polarity and there is no particular order to meet) with the outgoing resistance of the blue wire and connect it to the terminal "SEL 1" at the top left.
Twist the other end of the resistor with another resistor and screw it in the "SEL 2" terminal.
Repeat until "SEL 12" .

Then cross on the right terminal to go to "SEL 13",continue until "SEL 24"
On this terminal ("SEL 24") screw the 24th resistance with the red wire,
Screw the other end of this red wire with the brown wire to the "5 volts" terminal (bottom left).
Finish with the white wire,screw it to the signal terminal.
If you have a soldering iron, you can drop some welding on twisted resistors before screwing them into the terminals.

Place back the coin acceptor, replace both 24V filament bulbs by two 5V LED bulbs,if needed,they're on sale on www.retroelectronic.com . Colors available: white red or blue.

Close the wallbox, most of the work is now finished! ! ! ......

The 3-wires cable will have now to be connected on the PACKARD2MP3 system,just wire it that way :

Connect the white wire to the signal , the brown one to the 5V and the green one to the ground (GND)

You can now connect it directly to two speakers , or you can also use the 3.5mm stereo audio jack connector to connect it to an amplified speaker or an hifi amplifier.

If you use the amplifier,Please note that the built in stereo audio amplifier of the wallbox2mp3 is a Class D.This means that it has floating outputs. You must never connect the two minus (-) together,each one must be wired to its own terminal. Or you could just destroy the built in audio amplifier. The warranty

Last step : create your playlist and optionally your configuration file :

Configuring your wallbox and creating your playlist is a necessary operation simplified by the supplied wallbox2mp3 software . The latest version is available on our website: http://www.wallbox2mp3.com/en/software/

Indeed , the wallbox2mp3 needs minimum informations and contents to operate.

It needs :

- A content (a playlist of MP3 files) : a series of mp3 files contained on the SD card

- Optionally, it needs to know if it has to play a random selection when no choice is made and if so after how long it has to play.

At startup, the wallbox2mp3 search a configuration file .cnf in the root of the SD card. When it finds it, it reads the name to derive the necessary informations for proper operation.

Do it By the supplied software (if you prefer doing it manually,please refer to the packard2mp3 installation manual for packard system,you'll find all needed informations)

Setting up your wallbox and defining your playlist is quite simple with the wallbox2mp3 software

Step 1 : download the software

Just download it here : http://www.wallbox2mp3.com/en/software/

In order to install our application you must have java installed on your computer, java is installed by default on almost all computers but if this is not yet the case for you, you can download it at: http: // www. java.com

The Wallbox2mp3 software itself requires no installation, simply click on the .jar file (Java executable) to launch. Thus it is portable and can also be launched from removable media such as a USB key.

As our software is programmed in Java, it is universal and works independently on Windows (XP 10.1), MacOS or Linux

Simply launch the executable file and the program starts.

For more information on the operation and use of the software, please visit: http://www.wallbox2mp3.com/en/software/

It will configure the SD card automatically for you. Beyond that, it will also allow you to generate your customized titlestrips to print. By using the idtags contained in your MP3 (if any), it may also pre-populate your fields "title" and "Artist" . So you'll be able to save many hours of tedious work.

- Plug your SD card

You can now plug your 5VDC 2A power supply to the barrel jack and test your work.

A video of a working Buckley Music Box is available on youtube :

https://www.youtube.com/watch?v=KJjbaLpgBKw

Problems and Solutions

if you have any trouble concerning your wallbox, we remind you that you can ask your questions on our website: www.wallbox2mp3.com/en
A technician consults it every days to answer to your questions.

-> My packard2mp3 is connected and wired correctly but nothing works and the blue LED does not light up.

You have a power problem. First, make sure the AC adapter is plugged in. A LED is on the AC adapter supplied with the wallbox2mp3, check that it is turned on. If it's not, check the plug to which it is connected.

ATTENTION IMPORTANT: Only use the AC adapter supplied with your wallbox2mp3 or a 5V DC power adapter minimum 1 amp with a barrel connector Jack 5.5X2.1mm with the + on the internal connector and the - on the outline, otherwise you could generate irreversible damage not covered by the warranty of your wallbox2mp3.
The AC adapter is covered by our warranty, and propose alternative adapters suitable for your wallbox2mp3 low price if you were no longer covered by warranty.

-> My packard2mp3 is connected and wired correctly, it lights but plays a different title than the one selected and / or does not always play if at all when I make a selection

First,check that all resistors are well connected , then check all the contacts of the internal wheel.

If the the contacts or the wheel have too rusty or dusty connectors, the packard2mp3 can not correctly interpret the information received. Refer to our website http://www.wallbox2mp3.com/en/support/ and see our tips and tutorials to properly maintain or repair your wallbox.

-> My packard2mp3 refuses to play anything and the red LED (error) flashes:

Our system has a self diagnosis to determine the source of a possible problem and remedy easily.

Here is how to interpret this signal:

- 2 flashes loop:

The packard2mp3 fails to initialize the SD card; Make sure you insert a Secure Digital card in the slot provided for this purpose; If so, then remove and reinsert it. The packard2mp3 is compatible with most SD cards, regardless of memory size, brand, etc ... It can happen in very rare cases that an sd card may be incompatible with our system; it would be a card that does not accept connections Serial Protocol Interface (SPI). If the problem persists, try to transfer the data to another SD card.

- 3 flashes:

The packard2mp3 not find any mp3 file to the root of the sd card. The SD Card is well initialized but nothing can be done.

We remind you that the wallbox2mp3 can only play MP3 files, you can find links on our website to free converter mp3 files if you do not have such as .wav, .wma, etc. ...

We also remind you that the system lists mp3 files only to the root of the SD card. If they are in a folder, move them to the root, so they will be detected.

For example, if the location on your computer to your SD card is D: then the .cnf and .mp3 files should be in:
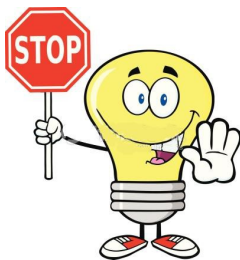
d: \ sel001.mp3

and not in:

d: \ somefolder \ sel001.mp3

- 4 flashes loop:

Mp3 decoder chip communicates poorly or not at all with the system, turn off and on the wallbox2mp3. If the problem persists, contact our technical service.

The insertion and removal of the SD card should not be done when the wallbox2mp3 is switched on.

The SD card will not be recognized by the wallbox2mp3 if it is still powered when you plug-in the card.

Identifying terminals in your wallbox, and installation tips

Please note that our system only replaces the jukebox that was previously connected to your wallbox.
Therefore, you should always insert a coin in your wallbox to make it work.
If you want to disable the coin function, and operate your wallbox in "free play", please refer to our tutorials.

The connection between your wallbox and the packard2mp3 card will be made with a 3-conductors cable.If you decide to use a shielded cable,the shield MUST be wired to the ground or you'll have some electromagnetic noises
The cable section will ideally be between 0.50 mm and 1mm (AWG 20 to17).
Preferably use the flexible cable such as: HO5VV-F 3G 0.75
Rate the distance between your wallbox and wallbox2mp3 and use the appropriate length of cable. Do not make loops with cable, and use strictly necessary length.

A coiled cable surplus may cause malfunction and noise.

www. Wallbox2mp3 .com

Turn your wallbox into jukebox

Thank you for your support and feel free to contact us if you have any question:)