



# WallboxPlayer – Installation (Generic/Other)

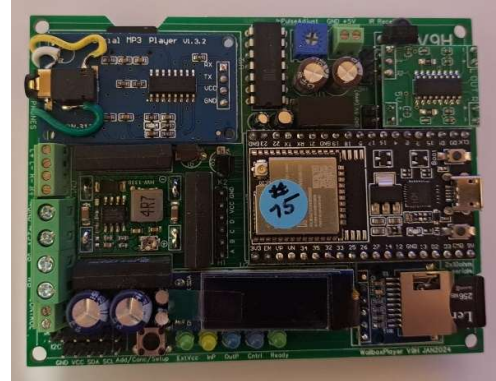
[www.wallboxplayer.com](http://www.wallboxplayer.com)

JUN 2025

The WallboxPlayer is a device that turns your wallbox into a music player. This manual provides basic instructions on how to connect/install a WallboxPlayer and operate the WallboxPlayer.

## 1 General Description

**The WallboxPlayer supports** a range of pulse-controlled jukeboxes. Power to the player is provided from the wallbox, reducing the need for an extra power supply. Music is stored on a microSD card and can be filled matching the wallbox titles. The on-board player accepts a user-filled microSD card. It has a jack plug for headphones or external audio. The board has an optional data microSD-slot for supporting functions. There are buttons for HW reset on the microprocessor and 'select' to do the setup, cancel or add a play. LEDs indicate pulses coming in or going out and an optional credit pulse being made. The board features header connectors for an external 16x2 I2C LCD display. All settings are done in the setup through software and stored.



The board has one trimmer to tune the sensitivity/speed of the incoming pulse signal. The board is powered through the external 24VAC and converts this to 5V through the on-board voltage converter. The board is 7.5 cm x 9 cm and can be mounted in popular wallboxes, or outside in separate housing.

**The 24VAC power from the wallbox** is used, either through widely available 24VAC/AC, alternating current output, (48VA; 2A) transformer or adapter. An optional fuse in the primary and/or secondary power lines avoids short circuit issues. The WallboxPlayer can also be powered by the 24V AC from the jukebox.

**The music MP3/WAV SD card slot** can be found on the top left under the music player. The contacts should be on your side and visible before inserting. The music files are stored on a micro-SD card. Ensure the card is clicked in. The microSD card must be formatted as FAT32 (max 16GB)! The number of (MP3 or WAV) files can be as many selections as the wallbox can select.

**Speaker output** is via the (optional) onboard amplifier, two speakers (max 2\*3W, at least 8ohm) can be connected using short cables. These speakers can be within the wallbox or external. The speaker output is via the connector labeled SpL+ SpL-, SpR+ and SpR-. Note the difference between wiring two separate speakers or a 3-lead consolette (see further below in this document)!

**LEDs onboard** are used to display status:

- ExtVcc24V [green] Lights when external 24V is connected (converted to 5V), supplying the board
- InP [yellow] – lights up when a wallbox pulse is detected
- Cntrl [blue] – indicates 2<sup>nd</sup> relay on/off
- Ready [green] – shows that system is listening/ready to accept inputs (from wallbox or app).

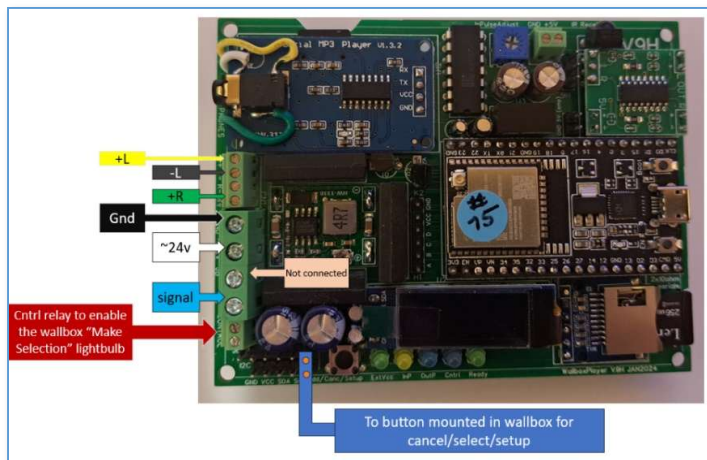
The music player mounted on the board has a red light that lights when the player is ready and blinks when playing a song.

**Adjustments** are not required. In case of issues the blue potentiometer can be used to tune the sensitivity of the input pulse from the wallbox, detected by the system. It allows for either slower turning motors or 60Hz to work properly.



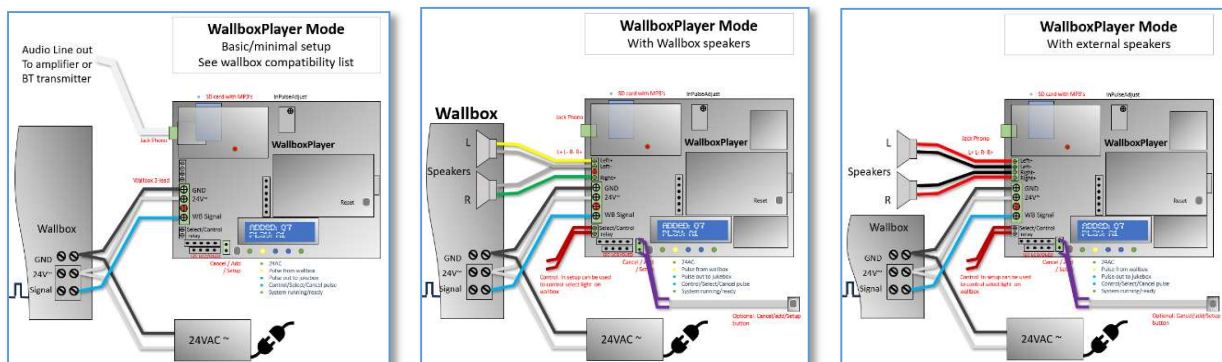
## 2 Installation

Make connections to the board as shown.



After connections have been made, powering up should show screen startup messages and number of music files on card. After a few seconds the system will show the green status light and be available for selections and will display it is ready to select a song. If the control relay is set up to enable the lightbulb, the blue led will also be on. When during startup, the music (MP3/WAV) files cannot be read, the status LED will blink twice, and the red music-player LED will not be on.

### Overview of wiring to wallbox:



The onboard 'select' button perform setup serves two functions, its primary function with a short press, is to CANCEL the currently playing song or ADD a song when nothing is playing. For the latest releases, a long press (~2 seconds) will START and STOP **AutoPlay**. The secondary function of this button is used within the **setup menu** which follows. The setup menu is accessed by pressing the 'select' button for at least 5 seconds. After the instruction, which will be displayed for a few seconds, subsequent settings will be shown to be modified. Pressing the button will change the value of the item, waiting will show the next configuration item.

The **setup menu** allows you to configure the following settings:

**Tools:** This menu choice will allow system updates, reset values, restart and a measure/listen utility mode.

**"RESTART"** will restart the device. Note that the music player will keep playing until early in the startup process.

Selecting **"DEFAULTS"** will set values of settings back to factory defaults. Choices: **NO**, **RESTART**, **DEFAULTS**, **UPDATEMODE**, **LISTEN**, (**SPOTIFYTOKEN**).

**Wallbox\_In:** This will configure what input signal is detected by the board, the type of wallbox the board is connected to. Compatible choices: **NONE**, **MP3**, **Sb\_3W1**, **Sb\_3W100**, **Sb\_3W160**, **Sb\_3WA**, **Sb\_SC1**, **Seeburg\_DEC**, **Seeb\_DEC-direct**, **Ami\_W40**, **Ami\_W80**, **Ami\_W120**, **Ami\_W200**, **Roc\_1544**, **Roc\_1555**, **Roc\_1558**, **Wur\_5207**, **Wur\_5210**, **Wur\_5220**, **Wur\_5225**, **Wur\_5250**, **WiFiControl**,... and more depending on release.

**Jukebox\_Out or Player\_out:** for WallboxPlayer mode and audio output, this must be **MP3**. For other selections, it will send out a pulse to a connected jukebox. If output is Spotify, and settings are correctly entered in the config, songs will be played on the linked Spotify account/device.



**AutoPlay:** This value sets the time in seconds until a random song is added to the queue. Selecting 0 will disable this function. Setting it to 60 will add song after one minute of idle time. Choices: 0, 15, 60, 300, 3600.

**Volume:** This will determine the output volume of the MP3 player (jack output and speakers). It can be adjusted from 0 to 24. Choices: 0...24. Suggested is 20.

**Equalizer:** This will select one of the available equalizers (jack output and speakers). Choices: FLAT, POP, ROCK, CLASSIC, BASS. Suggested are Pop or Bass. Newer releases have boost-variations.

**AutoPlay\_number:** Selecting this number with the buttons, (1=A1, 160=V8, etc.), will select autoplay and play random songs until selected again. (0, 1 ... 159, 160, 200 (default is 0). Suggested is the highest number selectable (100 or 160 or 200).

**Control\_mode:** determines the function of the additional on-board relay: NONE, JBCANCEL, WBCOIN, WBCREDIT, SELECT, ON-OFF (default is ON-OFF). The "Select mode" can be used to enable the "Make selection" lightbulb in the wallbox. WBCOIN is to generate a coin drop with the relay after a selection is made.

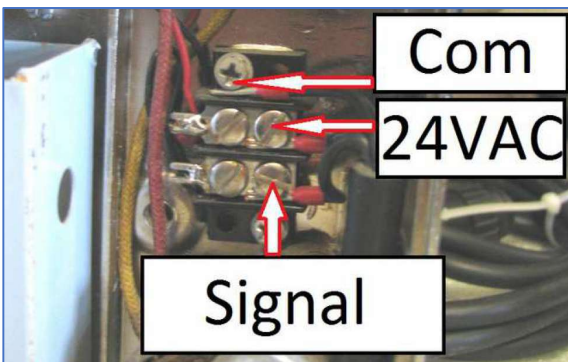
### 3 CONNECTIONS:

In the pictures below, wires go to the large green 4p screw header on the WallboxPlayer.

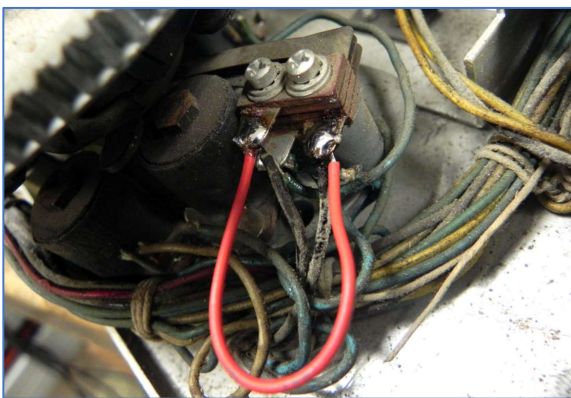
common	> ~GND
24/25VAC	> ~ 24/25V
Signal	> Wallb

#### 3.1 AMI:

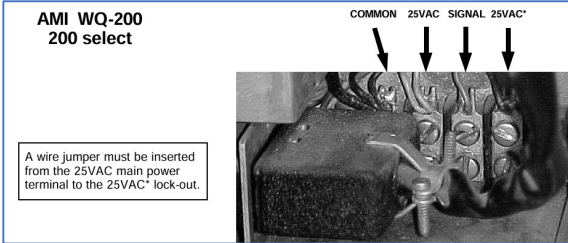
**AMI W40, W80, W120:**



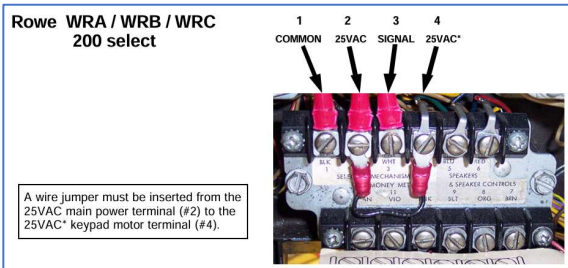
**AMI W120 Freeplay:**



**AMI WQ200 (200):**

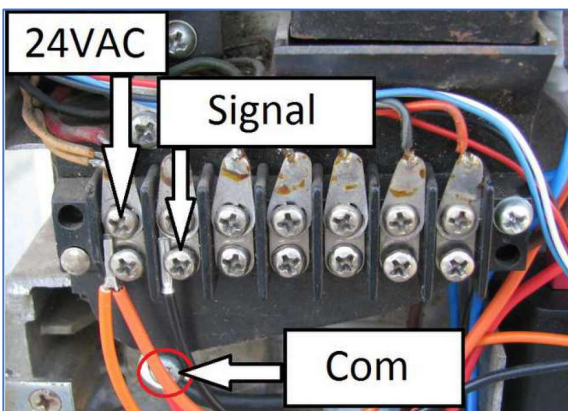


### ROWE-AMI WRA-WRC (200):

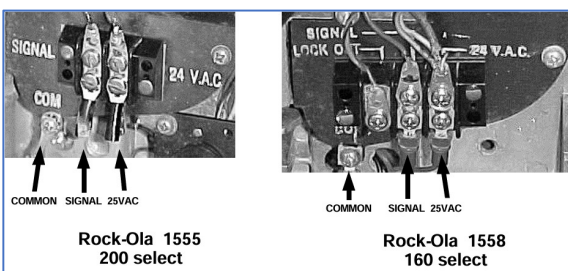


## 3.2 ROCK-OLA

### Rock-Ola 500:

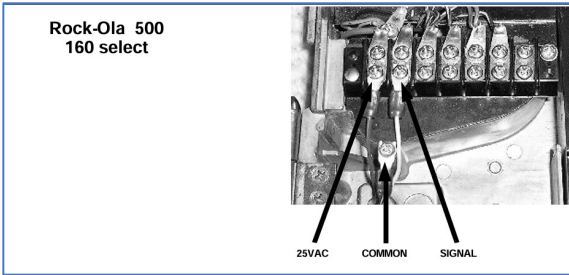


### Rock-Ola 1555(200)/1558(160):

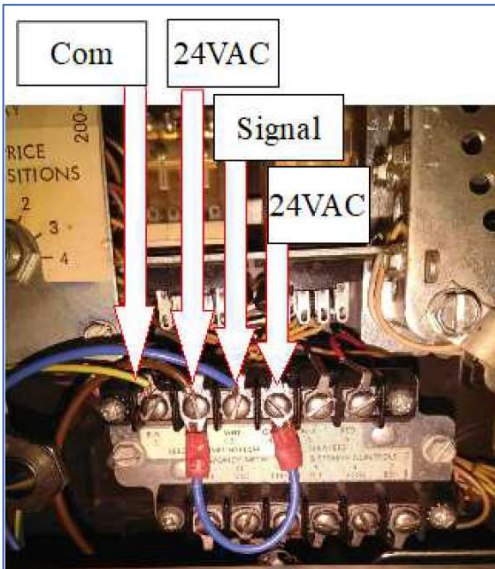


### Rock-Ola 500 (160):

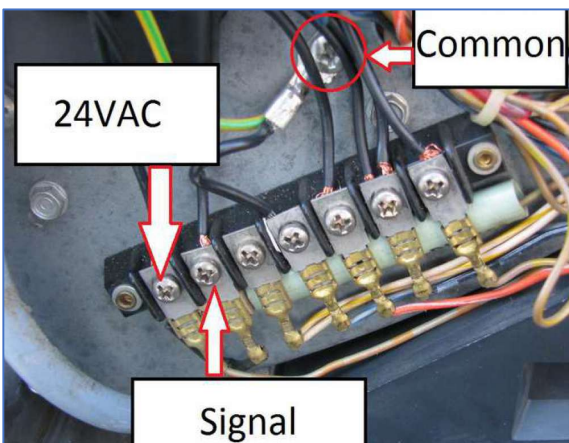


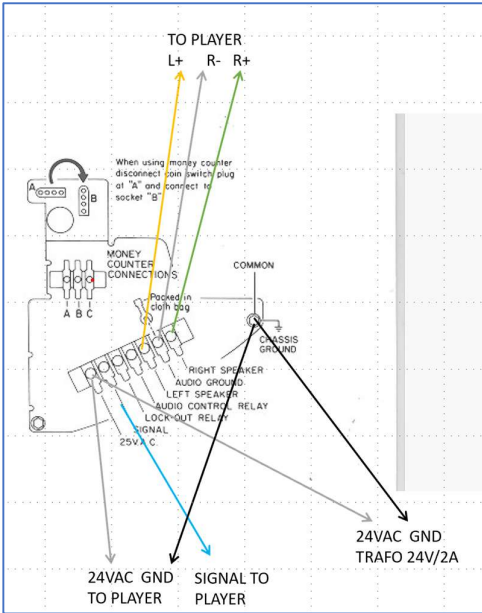


Rock-Ola 503/504:



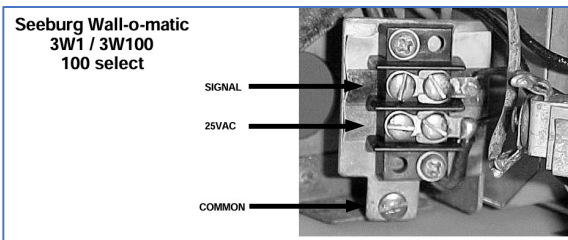
Rock-Ola 507(160):



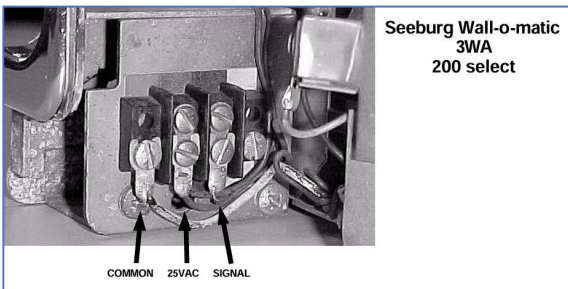


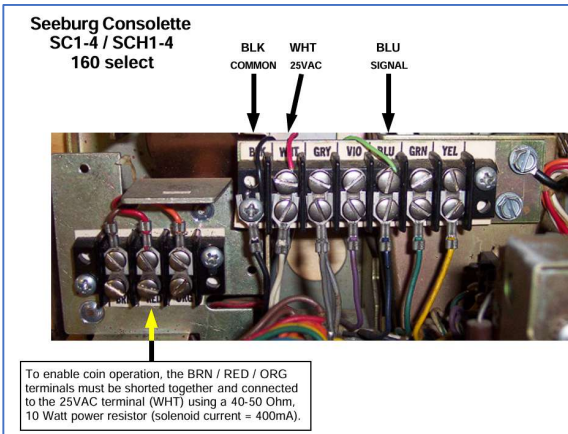
### 3.3 SEEBURG

#### Seeburg 3W1/100:



#### Seeburg 3WA:

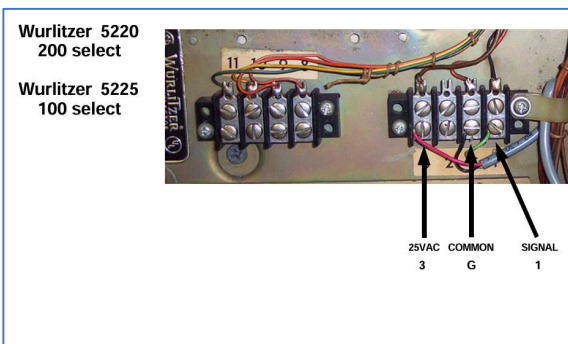


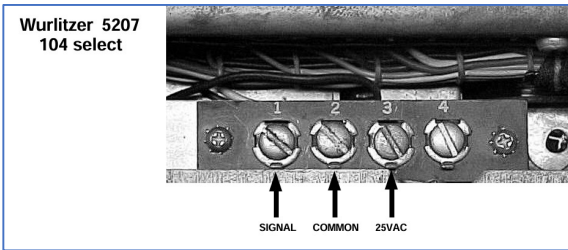
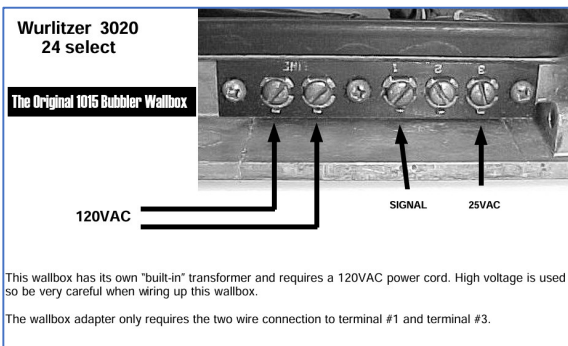
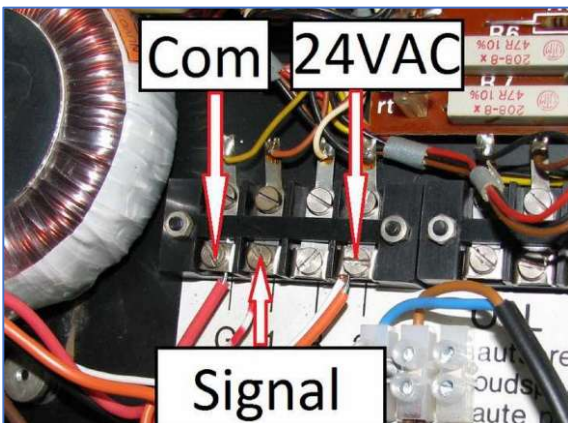
**Seeburg SC1-SCH4:**

## 3.4 UNITED

**UNITED UWB1 (24V, GND, SIGNAL):**

## 3.5 WURLITZER

**Wurlitzer 5220/5225:**

**Wurlitzer 5207 (104):****Wurlitzer 5250 (200):****Wurlitzer 3020 (24):****Wurlitzer FW160:**



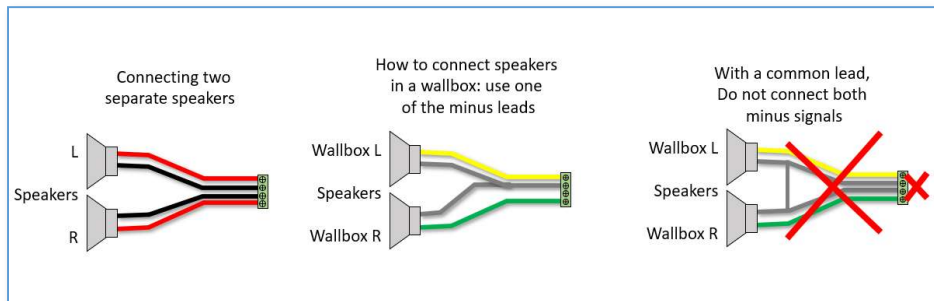


### 3.6 Connections to WallboxPlayer

- Connect the select/cancel/setup button
- Optional, connect the relay to enable the Wallbox “Make selection” lightbulb or as extra coin-drop for systems where Freeplay is difficult. Behavior can be changed in setup.



**Important: Connecting the speakers** in a wallbox (or a set of 2 speakers)



**Important: making a connection between one of the 4 leads and the ground of the wallbox will result in (irreparable) damage of the onboard amplifier.**

### 3.7 Connecting the 24V AC/AC transformer and powering up

- Connect the 24VAC/AC (2A) transformer to connector on the WallboxPlayer GND=BLK and WHT =24VAC.
- After powering up, the WallboxPlayer will also power up and the display will show relevant information on status and number of songs etc. After starting up the display will show it is ready to select a song.
- Press the “Select/Cancel/Setup button on the board to test if song will start. Press again to cancel.
- Make selection on the Wallbox with the buttons. If blue lead is correctly connected, the yellow lamp will flash during rotor movement. Song will start and number played will be shown.

### 3.8 Pairing optional Bluetooth

- When paired and connected, the red Bluetooth LED blinks twice at ~5 sec interval.
- When idle and unpaired the red LED flashes slowly (~1sec interval)
- Short press the button for unpairing.
- To pair with a Bluetooth device, ensure it is not paired (with other device) and put the Bluetooth speaker in pairing mode and press (2sec) the pair button, the red LED will blink slowly (at ~2sec interval) and start pairing
- For more information look at the KCX BT module documentation.



## 4 OPERATION:

The **WallboxPlayer** in the wallbox (or an enclosure) has the following functions are available

- Songs can be selected on the wallbox, play will start after selection or when a song is playing, song will be added to the queue



- If a song is playing, the 'select' button will cancel the song (and play next in queue)
- If no song is playing, pressing the 'select' button will add a random song to the queue
- After choosing the AutoPlay number/selection (as set in the setup, 1,2,159,160), random songs will automatically be added and played (even song files on the SD beyond the selection limit of 160 or 200 – see instructions further below for how to do this.), select AutoPlay number again to switch off the function

### (Re)loading songs, playing more than 160/200 and making listing

The music files are stored on a micro-SD card. Ensure the card is clicked in. The microSD card must be formatted as FAT32 (max 32GB)! The number of (MP3/WAV) files can be as many selections as the wallbox can select. The best place for the music files is in the root folder of the card. When copying files from the PC onto the SD card, **Windows can hustle the order that then does not match the file/selections**. A foolproof way to get the numbering and order right is as follows:

- Format the SD card
- Copy files from computer to SD with drag and drop, one at a time starting with the first one
- Wait until each file is copied, then copy the next (every time just one at a time)

This way, windows will not change the order as every file can only be added and has a later timestamp than the previous one.

**The best way to get a matching listing** of the order of the songs on the SD, use Windows CMD command:

**DIR /B /A:-D \*.MP3 > SONGS.TXT**

This will create a file that you can read and use for song titles.

Some configurations have a data (2<sup>nd</sup>) SD card slot; this will store song titles that are displayed on the display (and web browser).

A file **/LABELS/SONGS.TXT** (edit with NOTEPAD!) with titles for each song will then be used.

```
F:\>DIR /B /A:-D *.MP3 > SONGS.TXT

F:\>DIR /B /A:-D *.MP3
0001 - Queen - Bohemian Rhapsody.mp3
0002 - Eagles - Hotel California.mp3
0003 - Deep Purple - Child In Time.mp3
0004 - Led Zeppelin - Stairway To Heaven.mp3
0005 - Meat Loaf - Paradise By The Dashboard Light.mp3
0006 - Alan Parsons Project - Old And Wise.mp3
0007 - Animals - House Of The Rising Sun.mp3
0008 - Dire Straits - Brothers In Arms.mp3
0009 - Beatles - Hey Jude.mp3
0010 - John Lennon - Imagine.mp3
```

The WallboxPlayer will also play songs that go beyond the selectable numbers (160/200). This is great for random play and hearing (random/surprise) songs other than the ones on the labels. For this, the best way is to create an extra folder (after having put the 160/200 songs on the SD) and simply fill it with the songs you want to hear in random play mode. In below, the folder "extra songs" contains (up to ~800) songs.

Name	Status	#
Extra songs	●	
0001 - Queen - Bohemian Rhapsody.mp3	●	1
0002 - Eagles - Hotel California.mp3	●	2
0003 - Deep Purple - Child In Time.mp3	●	3
0004 - Led Zeppelin - Stairway To Heaven.mp3	●	4
0005 - Meat Loaf - Paradise By The Dashboard Light.mp3	●	5
0006 - Alan Parsons Project - Old And Wise.mp3	●	6
0007 - Animals - House Of The Rising Sun.mp3	●	7
0008 - Dire Straits - Brothers In Arms.mp3	●	8

Name	Status	Date
01. Camel - Left Luggage.mp3	●	1/1
01. Camel - Slow Yourself Down.mp3	●	1/1
02. Camel - Echoes.mp3	●	1/1
02. Camel - Hymn To Her.mp3	●	1/1
04. Camel - Highways of the Sun.mp3	●	1/1
05. Camel - Never Let Go.mp3	●	1/1
05. Camel - Song Within A Song.mp3	●	1/1
05. Camel - Stationary Traveller (Instrumental).mp3	●	1/1
05. Camel - Hymn To Her.mp3	●	1/1
06. Camel - Song Within A Song.mp3	●	1/1
06. Camel - West Berlin.mp3	●	1/1

### Selection conversion table:



NBR	LTR	SEL	REC	NBR	LTR	SEL	REC	NBR	LTR	SEL	REC	NBR	LTR	SEL	REC
A1	A1	001	100	F1	L3	051	125	L1	A6	101	150	R1	L8	151	175
A2	B1	002	200	F2	M3	052	225	L2	B6	102	250	R2	M8	152	275
A3	C1	003	101	F3	N3	053	126	L3	C6	103	151	R3	N8	153	176
A4	D1	004	201	F4	P3	054	226	L4	D6	104	251	R4	P8	154	276
A5	E1	005	102	F5	Q3	055	127	L5	E6	105	152	R5	Q8	155	177
A6	F1	006	202	F6	R3	056	227	L6	F6	106	252	R6	R8	156	277
A7	G1	007	103	F7	S3	057	128	L7	G6	107	153	R7	S8	157	178
A8	H1	008	203	F8	T3	058	228	L8	H6	108	253	R8	T8	158	278
A9	J1	009	104	F9	U3	059	129	L9	J6	109	154	R9	U8	159	179
A0	K1	010	204	F0	V3	060	229	L0	K6	110	254	R0	V8	160	279
B1	L1	011	105	G1	A4	061	130	M1	L6	111	155	S1	A9	161	180
B2	M1	012	205	G2	B4	062	230	M2	M6	112	255	S2	B9	162	280
B3	N1	013	106	G3	C4	063	131	M3	N6	113	156	S3	C9	163	181
B4	P1	014	206	G4	D4	064	231	M4	P6	114	256	S4	D9	164	281
B5	Q1	015	107	G5	E4	065	132	M5	Q6	115	157	S5	E9	165	182
B6	R1	016	207	G6	F4	066	232	M6	R6	116	257	S6	F9	166	282
B7	S1	017	108	G7	G4	067	133	M7	S6	117	158	S7	G9	167	183
B8	T1	018	208	G8	H4	068	233	M8	T6	118	258	S8	H9	168	283
B9	U1	019	109	G9	J4	069	134	M9	U6	119	159	S9	J9	169	184
B0	V1	020	209	G0	K4	070	234	M0	V6	120	259	S0	K9	170	284
C1	A2	021	110	H1	L4	071	135	N1	A7	121	160	T1	L9	171	185
C2	B2	022	210	H2	M4	072	235	N2	B7	122	260	T2	M9	172	285
C3	C2	023	111	H3	N4	073	136	N3	C7	123	161	T3	N9	173	186
C4	D2	024	211	H4	P4	074	236	N4	D7	124	261	T4	P9	174	286
C5	E2	025	112	H5	Q4	075	137	N5	E7	125	162	T5	Q9	175	187
C6	F2	026	212	H6	R4	076	237	N6	F7	126	262	T6	R9	176	287
C7	G2	027	113	H7	S4	077	138	N7	G7	127	163	T7	S9	177	188
C8	H2	028	213	H8	T4	078	238	N8	H7	128	263	T8	T9	178	288
C9	J2	029	114	H9	U4	079	139	N9	J7	129	164	T9	U9	179	189
C0	K2	030	214	H0	V4	080	239	N0	K7	130	264	T0	V9	180	289
D1	L2	031	115	J1	A5	081	140	P1	L7	131	165	U1	A0	181	190
D2	M2	032	215	J2	B5	082	240	P2	M7	132	265	U2	B0	182	290
D3	N2	033	116	J3	C5	083	141	P3	N7	133	166	U3	C0	183	191
D4	P2	034	216	J4	D5	084	241	P4	P7	134	266	U4	D0	184	291
D5	Q2	035	117	J5	E5	085	142	P5	Q7	135	167	U5	E0	185	192
D6	R2	036	217	J6	F5	086	242	P6	R7	136	267	U6	F0	186	292
D7	S2	037	118	J7	G5	087	143	P7	S7	137	168	U7	G0	187	193
D8	T2	038	218	J8	H5	088	243	P8	T7	138	268	U8	H0	188	293
D9	U2	039	119	J9	J5	089	144	P9	U7	139	169	U9	J0	189	194
D0	V2	040	219	J0	K5	090	244	P0	V7	140	269	U0	K0	190	294
E1	A3	041	120	K1	L5	091	145	Q1	A8	141	170	V1	L0	191	195
E2	B3	042	220	K2	M5	092	245	Q2	B8	142	270	V2	M0	192	295
E3	C3	043	121	K3	N5	093	146	Q3	C8	143	171	V3	N0	193	196
E4	D3	044	221	K4	P5	094	246	Q4	D8	144	271	V4	P0	194	296
E5	E3	045	122	K5	Q5	095	147	Q5	E8	145	172	V5	Q0	195	197
E6	F3	046	222	K6	R5	096	247	Q6	F8	146	272	V6	R0	196	297
E7	G3	047	123	K7	S5	097	148	Q7	G8	147	173	V7	S0	197	198
E8	H3	048	223	K8	T5	098	248	Q8	H8	148	273	V8	T0	198	298
E9	J3	049	124	K9	U5	099	149	Q9	J8	149	174	V9	U0	199	199
E0	K3	050	224	K0	V5	100	249	Q0	K8	150	274	V0	V0	200	299

## Troubleshooting

If for a consolette, the number selected by the MP3 player is higher than selected with the buttons, not enough pulses are received. Check if the rotor contacts are clean. You can try to adjust the blue potentiometer on the board and turn more to the left or right, but this should not be needed.

Please contact me in case of questions or inquiries or items not described here.

[www.wallboxplayer.com](http://www.wallboxplayer.com)

[jhmheuvell@gmail.com](mailto:jhmheuvell@gmail.com) and Joopheuvell on Jukebox Addicts Board